

A LITTLE BIT OF CANCER?

BENJAMIN CHIN-YEE
Western University

Should we say *a little bit of cancer*? Many argue that we should avoid the phrase and instead relabel early cancers as a strategy to prevent overtreatment. Against this, I argue that we should not shy away from saying *a little bit of cancer*, and, moreover, that shying away misses a key opportunity to address the problem of overtreatment. Drawing on speech act theory, I examine the diagnosis of cancer as an illocutionary speech act and argue for a revisionist strategy which seeks to shift the normative force of the cancer diagnosis qua speech act. I show how this strategy offers distinct advantages vis-à-vis alternative approaches to tackling the problem of overtreatment.

1. Introduction

Should we say *a little bit of cancer*? The phrase itself is a bit puzzling. Cancer, after all, is a serious disease—“the emperor of all maladies.”¹ Few diseases, Sontag reminds us, are so widely considered “a synonym for death.”² Having just a little bit is small reassurance.

On the other hand, many of us have just that—*a little bit of cancer*. Research shows that a large portion of us have tiny bits of cancer growing slowly in various organs of our bodies—from our breasts to our bone marrows—biologically indistinguishable from what we call the fearsome disease.³

Should we not, then, call this “a little bit of cancer”? Many think not. As two leading oncologists titled a recent *New York Times* op-ed: “Not Everything We Call Cancer Should Be Called Cancer.”⁴ Such talk, they argue, drives overtreatment and causes harm—harm, for example, from unnecessary surgeries to remove

1. Mukherjee (2011: xviii).

2. Sontag (1978: 8).

3. See, for example, Thompson et al. (2004); Rawstron et al. (2008).

4. Esserman & Eggener (2023). They reiterate a position that is well staked out in the literature; see e.g. Esserman et al. (2014); Nickel et al. (2018); Eggener et al. (2022).

Contact: Benjamin Chin-Yee <benjamin.chinyee@gmail.com>

“cancers” that would never progress. Rather than saying “a little bit of cancer,” we should instead *relabel* it something else—“anything but the dreaded C-word.”

Some philosophers argue the same, albeit for different reasons. For them, the issue is not merely semantic but ontological. It arises in debates over drawing the line between risk factors and disease—between precancer and cancer. Schwartz (2007; 2014) thinks that what we call cancer depends on a condition’s frequency and bad effects. The early breast tumour, ductal carcinoma in situ (DCIS), for instance, is *not* cancer because it occurs at a high frequency and, generally, does not cause sufficient bad effects. For Schwartz, DCIS along with other small tumours are more aptly called risk factors, not diseases. In lieu of ductal *carcinoma* in situ, this little bit of cancer should be renamed a non-C-word.⁵

Prima facie this view seems plausible. We care about cancer because of its bad effects—effects that we hope to mitigate through appropriate treatment. Calling something “cancer” signals a condition with bad effects and a need for treatment to mitigate those effects. If, however, that condition does not have sufficient bad effects, and, moreover, if treating that condition only causes unnecessary harm, then perhaps it shouldn’t be called cancer. In other words, saying “a little bit of cancer” in such a case is an instance of overdiagnosis leading to overtreatment.

In this paper, I argue the opposite—we should not shy away from saying “a little bit of cancer,” and, moreover, shying away misses the mark as a strategy for addressing overtreatment of early cancers.

My argument builds on John’s (2022) recent examination of the normative force behind the speech act of diagnosis. To diagnose disease is not merely to describe a bodily state but also to change the normative status of the person diagnosed. This argument might seem to reach a similar conclusion as above: we should avoid saying “a little bit of cancer” insofar as we think it inappropriate to label such a person a “cancer patient.”

But there is another, more radical upshot that merits consideration. Seeing diagnosis as an “ethically weighty activity” (John 2022: 12), also allows us to see how this ethical weight, the normative force behind a particular diagnosis, can be shifted. Focusing on the diagnosis of cancer, I argue that, rather than engineering euphemisms or renaming risk factors, we should pay more serious attention to shifting the normative force behind the dreaded C-word. Only in this way can we truly tackle the growing problem of overtreatment.⁶

I make my case as follows. In §2, I introduce two fictional cases to illustrate the variable normative force of diagnosis before introducing John’s (2022) judicial analogy of diagnosis as a verdictive speech act. I discuss the problem of cancer overtreatment and show how this analogy suggests an underexplored alternative

5. Esserman et al. (2014) propose “indolent lesion of epithelial origin (IDLE).”

6. For general overviews of cancer overdiagnosis and overtreatment, see Welch & Black (2010); Esserman et al. (2014).

for handling this problem. In §3, I develop this alternative, arguing for a *revisionist strategy* which seeks to revise a specific aspect of the normative force of the cancer diagnosis I call *the fighter effect*. In §4, I provide four reasons why the revisionist approach is at least as compelling as *restrictive* and *relabelling strategies*, arguing that revisionism is at once *radical*, *rational*, *respectful*, and *robust*. In §5, I consider three objections. Though I propose a revisionist strategy as a means of reducing overtreatment of early cancers, the argument has implications for cancer treatment more generally. I conclude in §6 by reflecting on these implications.

2. Normative Force of Diagnosis

2.1 Cases

Consider two cases:

DISEASE X. Imagine you are diagnosed with a disease. Call it disease X. You recall the events leading to your diagnosis: one day you stubbed your toe; a few days later the toenail turned opaque; after a week so did the adjacent toenail; eventually a patron at your local swimming pool suggested you see a doctor to deal with your unsightly toes.

Your doctor tells you that disease X is “not too serious.” She says that it is slow growing; that it should not adversely impact your life. It is, however, likely to spread to affect your other toes. It’s less likely to cause other complications, such as more serious, life-threatening infections, though there is a small risk. There are, she says, treatments to prevent these outcomes. She judges your disease too advanced for local measures—aside from amputation, which she advises against. There is a systemic treatment, a pill you can take for six months which offers a 60% chance of cure. But the pill comes with side effects, including diarrhea, loss of taste, and, in rare cases, severe and irreversible liver damage.

In presenting the treatment options, your doctor is equivocal: many patients, she says, choose to live with disease X. Nevertheless, put off by your unsightly toes, you opt for the systemic treatment. Thankfully, you are cured. You never again think of disease X, proudly displaying your immaculate toes at the swimming pool.

* * *

DISEASE Y. Imagine now that instead of disease X you are diagnosed with disease Y. You again recall the events leading to your diagnosis: one day, during an enthusiastic yoga session, you strained your groin; a few days

later you noticed some swelling in the area; when, a week later, you felt a lump on the opposite side, you consulted your doctor.

This time, when you see your doctor, she looks rather grave. After performing initial tests, she invites you back to the clinic to discuss the findings. She asks if you would like to bring a friend or family member. “I have some bad news,” she begins, “you have disease Y.” You shudder at the diagnosis. Fortunately, she says, it’s a slow growing case. It is, however, likely to spread with time. Its spread may eventually cause complications, some potentially life-threatening. But it may not do so within your lifetime. There is a systemic treatment, which lasts for six months and offers a 60% chance of cure. Side effects include diarrhea, hair loss, and, in some cases, life-threatening infections.

This time, in presenting the treatment options, your doctor is less equivocal: many patients, she says, find it difficult to live with disease Y. You see the disease Y clinic psychologist and social worker for counseling. They refer you to a support group to help you cope with your diagnosis. There, you hear stories of successful battles with disease Y. After some consideration, you opt for the systemic treatment. Thankfully, you are cured. Following your cure, you remain an active member of the disease Y support group to help others deal with the diagnosis of disease Y. You see yourself as a disease Y survivor.

* * *

What’s the difference between disease X and Y? Between onychomycosis, a fungal nail infection, and an indolent lymphoma, a slow growing cancer of the lymph system? The diseases, to be sure, differ in their natural history and severity. But a big—maybe even the biggest—difference between them lies in the normative force of the diagnosis.

2.2 *Diagnosis, Overdiagnosis, and Overtreatment*

In a recent paper, John (2022) proposes an analogy between a judge’s verdict and a doctor’s diagnosis to highlight the normative force of diagnosis qua verdictive speech act. Following Austin (1962), John distinguishes between the *illocutionary* force and *perlocutionary* effects of the speech act of diagnosis. The latter refers to the consequences that might follow from a given speech act; for example, a doctor saying “You have cancer” makes you upset, leads to further tests, treatment, and so on. The former, by contrast, captures the normative force behind this type of speech act; as a result of the doctor’s utterance, *you become a cancer patient*.

Whereas perlocutionary effects are contingent, illocutionary force is constitutive of the speech act—making you a patient is what diagnosing does.

John uses this analogy to disambiguate the harms of overdiagnosis and overtreatment, which are often conflated in the literature. We saw this above: Saying “a little bit of cancer” is bad insofar as it causes harm by leading to overtreatment.⁷ To be fair, some critics of overdiagnosis also point to other harms, such as the psychological distress experienced by patients and families. But the focus remains on the *perlocutionary* effects, i.e., the consequences that might follow from a given speech act. By drawing attention instead to the *illocutionary* force of diagnosis, i.e., its ability to change normative status, John reveals an overlooked source of harm. His approach encourages us, when contemplating the harms of overdiagnosis, to not only ask “What avoidable harms might result from diagnosing this patient?” but also “Is it right to make this person a patient in the first place?”

This seemingly subtle distinction cuts deeper than simply clarifying the harms of overdiagnosis vs. overtreatment. Rather, it has important implications for thinking about the nature of overdiagnosis itself. The most influential definition of overdiagnosis is the counterfactual: “when a condition is diagnosed that would otherwise not go on to cause symptoms or death” (Welch & Black 2010: 605). Others attempt to shore up this definition with additional premises. Carter et al. (2016) stipulate that the *diagnosis* in *overdiagnosis* must be “correct” according to a “professional community standard”: For overdiagnosis to occur, medical experts must first agree to classify a certain bodily state as a disease. This distinguishes overdiagnosis from simple *misdiagnosis*, where a disease label is incorrectly applied to a condition that does not meet established criteria.

When it comes to cancer, medical experts have indeed established very specific biological criteria to discriminate between cancerous, pre-cancerous and non-cancerous lesions. These criteria vary depending on the type of cancer but in general take into account qualitative and quantitative characteristics of cells and tissues, and sometimes additional clinical features. Consider, for example, prostate cancer (specifically prostatic acinar adenocarcinoma), the most common cancer in men, which features prominently in debates about overdiagnosis and overtreatment (e.g., Loeb et al. 2014; Eggener et al. 2022). Prostate cancer is diagnosed based on specific histologic criteria that include the presence of abnormal glands showing an infiltrative growth pattern, loss of normal basal cells, and atypical cell nuclei (Humphrey et al. 2016; Humphrey 2017; Netto et al. 2022; WHO 2022: 207–209). Pathologists use these criteria to distinguish prostate cancer from other pre-cancerous (e.g., high-grade prostatic intraepithelial neoplasia) and non-cancerous conditions (e.g., benign prostatic hyperpla-

7. See e.g., Welch & Black (2010: 605): “Continued adherence to the dictionary definition of cancer, however, can lead to harm—including overuse of anticancer therapies.”

sia). Or consider acute myeloid leukemia, an aggressive blood cancer, which is diagnosed based on specific cytological, immunophenotypic and genetic criteria, namely the presence of abnormal, immature white blood cells of a particular lineage (“myeloblasts”) that surpass a certain threshold or harbour specific genetic mutations (Arber et al. 2016; Swerdlow et al. 2017: 156–160; Khoury et al. 2022; Arber et al. 2022). Hematologists use these criteria to distinguish acute leukemia from other pre-cancerous (e.g., clonal hematopoiesis of indeterminate potential) and non-cancerous conditions (e.g., reactive leukocytosis). Or consider still plasma cell myeloma, a common cancer of the bone marrow, which is diagnosed based on specific histological and clinical criteria, requiring the presence of abnormal plasma cells in the bone marrow above a certain threshold alongside evidence of “end-organ damage,” such as anemia, renal insufficiency or bone lesions (Rajkumar et al. 2014; Swerdlow et al. 2017: 243–248; Alaggio et al. 2022). Again, medical experts—pathologists, hematologists, oncologists—use these criteria to distinguish plasma cell myeloma from other pre-cancerous (e.g., monoclonal gammopathy of undetermined significance) and non-cancerous conditions (e.g., polyclonal gammopathy).

These examples illustrate how medical experts have painstakingly devised criteria to draw the line between cancer, pre-cancer, and non-cancer. There are still, to be sure, grey areas and disagreements over whether criteria are met in particular cases. Such disagreements are usually resolved by ordering further tests, seeking second opinions, or consulting outside experts. There are even sometimes—albeit more rarely—disagreements over the criteria themselves, leading to competing classification systems.⁸ However, by and large, medical experts have specific biological criteria, enshrined in professional community standards, to determine what they call cancer and what they do not.

To be clear, these criteria or standards are *not* generally what is at issue in debates about overdiagnosis. It’s helpful here to distinguish concerns about overdiagnosis from related worries about medicalization or pathologization. Whereas medicalization refers to expanding medical authority over conditions not previously under medicine’s jurisdiction (Conrad 2007; Stegenga 2021), and pathologization refers to calling conditions “diseases” which are not properly pathological (Sholl 2017), overdiagnosis can occur despite agreement that a condition is pathological and falls under medicine’s jurisdiction.⁹ With overdi-

8. See, for example, Khoury et al. (2022) vs. Arber et al. (2022) for recent disagreement and competing classification systems in blood cancers, including acute myeloid leukemia. Nevertheless, there is a strong desire in the field to reach consensus over diagnostic criteria; see, for discussion, Aster (2023), Lim (2023), and Zureigat et al. (2025).

9. For discussion of the relationship between overdiagnosis and medicalization, see Hofmann (2016); for the relationship between medicalization and pathologization, see Sholl (2017).

agnosis, the main worry is that the act of diagnosing does not medically benefit the person diagnosed (Hofmann 2016; Carter et al. 2016).

A common way to understand overdiagnosis is through the existence of a “reservoir” of detectable disease, with overdiagnosis arising when the harms of detecting disease in members of that reservoir outweigh the benefits for those members (Welch & Black 2010). Overdiagnosis, therefore, is not a problem with the diagnostic criteria or classification system per se, but rather a problematic use of a classification system—i.e., a problematic speech act.

If John (2022) is right, however, a large part of what makes this speech act problematic is its normative effects—it creates “patients” where there shouldn’t be any. To return to the judicial analogy, the worry is about creating “criminals” of people who should not be criminalized. The worry is *not* that we are detecting a reservoir of hitherto undetected criminal activity. It is that we are calling people “criminals” who ought *not* be deemed criminals in the first place. By analogy, the doctor saying, “You have cancer,” is worrisome just in case it labels someone who is not properly a “cancer patient.”

This explains why, when leading oncologists say, “Not Everything We Call Cancer Should Be Called Cancer” (Esserman & Eggener 2023), it is really an argument about who should be called a cancer patient, not about cancer per se. It is about the normative effects of a disease label. As they put it: “Millions of patients have been compelled by well-intentioned loved ones to do something upon hearing a cancer diagnosis. And why wouldn’t they?”

We see this argument repeatedly in the medical literature.¹⁰ Calls for relabeling are motivated in part by normative considerations—by the “social implications” for the patient (Nickel et al. 2017: 10)—and worries that most see “the decision to live with untreated cancer” as “bizarre” (Eggener et al. 2022: 3111). The cancer diagnosis is “a call to action ... Few people can imagine standing by and doing nothing after being diagnosed with cancer” (Fagerlin et al. 2005: 3111). In the words of one patient, “doing nothing is no choice” (Charles et al. 1998: 77).

Therefore, in addition to *perlocutionary* effects, these arguments take into consideration the *illocutionary* force of the speech act of diagnosing cancer. Where we apply the C-word and where we do not, it is argued, should consider the normative effects of the cancer diagnosis.

But what are these normative effects exactly? I discuss this in more detail in the next section. For now, it suffices to note that the cancer diagnosis is widely acknowledged to carry certain “social implications” which make it especially difficult to live with untreated cancer. Calls to remove the word “cancer” from

10. See e.g., Esserman et al. (2014), Nickel et al. (2017), Nickel et al. (2018), Eggener et al. (2022), and Labbate et al. (2022).

certain diagnoses respond to these social implications. Those who call for its removal seem to assume that these normative effects should automatically attach to a diagnosis of cancer. They seem to assume that patients *should* be compelled to do something upon hearing the C-word. To repeat the words of Esserman and Eggener (2023)—*why wouldn't they?*

Contrary this assumption, however, there are in fact good reasons why these normative effects should not automatically attach to a cancer diagnosis—why patients should not be compelled “to do something” upon hearing the C-word—why one should not always hear “cancer” as a “call to action.” This claim might indeed strike many as “bizarre,” running counter to the widespread intuition that cancer is a deadly disease for which early detection and treatment are key. *Early detection saves lives*, say the slogans of countless cancer screening campaigns.

For certain cancers, this intuition is indeed correct—the earlier you are diagnosed and treated, the better. But the benefits are less clear than the slogans suggest (Woloshin et al. 2012; Gigerenzer 2014). Despite evidence that some screening interventions to detect early cancers may reduce cancer-specific mortality, there’s notable lack of evidence that screening improves *overall* survival (Black et al. 2002; Saquib et al. 2015; Prasad et al. 2016). In other words, while detecting and treating previously undetected cancers from the disease “reservoir” might lower the likelihood that its members die from that cancer during a given time period, it does not reduce their overall likelihood of dying during that same period. How can this be? One explanation is that existing trials are simply underpowered to detect differences in overall mortality. But another plausible explanation is that the benefits of early detection and treatment, namely the reduction in cancer-specific mortality, are counterbalanced by harms.¹¹

These are the harms of overdiagnosis and overtreatment. Admittedly, these harms are difficult to quantify.¹² Not all are captured by excess mortality. They also include excess morbidity from further testing and/or treatment, psychological distress, and financial costs (Ramsey et al. 2013; Esserman et al. 2014; Ramsey et al. 2016). A man whose prostate is surgically removed for low-risk prostate cancer is not able to say whether the side effects he suffered from surgery (such

11. Indeed, some experts worry that cancer screening programs actually *increase* overall mortality (Prasad et al. 2016). Several trials have shown divergent outcomes in terms of cancer-specific and overall mortality (Black et al. 2002; Saquib et al. 2015). Possible reasons include risks from the screening intervention itself (e.g., procedural risk or radiation exposure: Kim et al. 2019; Welch & Passow 2014), from the ensuing diagnostic tests (e.g., invasive biopsies: Gallina et al. 2008; Loeb et al. 2011), or from the subsequent treatment (e.g., surgery, radiation, or chemotherapy), as well as other unexpected deaths (e.g., suicide or cardiac death following a cancer diagnosis: Fall et al. 2009; Fang et al. 2010; Guo 2018). See also Plutynski (2017) for discussion.

12. They are also difficult to quantify because most trials of cancer screening fail to measure these harms (Heleno et al. 2013).

as urinary incontinence, erectile dysfunction, bowel dysfunction, and pain¹³) were, on balance, worth it. He is not able to say whether his early prostate cancer, had it not been removed, would “go on to cause symptoms or death” (Welch & Black 2010: 605). Nor can anyone else, for that matter. No one is in a position to determine, for any individual, whether they were overtreated.

What we *can* say, however, is that based on growing research on outcomes in early prostate cancer, it’s very likely he was overtreated. Several trials have shown that, for low-risk prostate cancer, active treatment with surgery or radiation results in no better outcomes than surveillance, with no difference in death from prostate cancer or other causes (Wilt et al. 2012; Hamdy et al. 2016; Wilt et al. 2017; Hamdy et al. 2023). Moreover, in these trials, surgery came at a cost of serious adverse events, occurring in over twenty percent of men (Wilt et al. 2012), and side effects from surgery persisted after twenty years of follow up (Wilt et al. 2017). As a result of these and other studies,¹⁴ there is now consensus among medical experts, reflected in numerous guidelines (Schaeffer et al. 2021; Eastham et al. 2022; Mottet et al. 2021), that surveillance, rather than treatment with surgery or radiation, is the recommended approach for low-risk prostate cancer. But despite such guidelines, surgery and radiation for low-risk prostate cancer remain common, with over fifty percent of patients receiving active treatment in some studies (Hoffman et al. 2022), and wide practice variation persists, with alarmingly high rates of surgery in some settings (Auffenberg et al. 2023; Washington et al. 2020; Cooperberg et al. 2023). Experts take this as evidence of ongoing overtreatment of early prostate cancer (Cooperberg et al. 2023).

Similar data on overtreatment also exists for other cancers, such as myeloma (Mohyuddin & Goodman 2024), thyroid (Jegerlehner et al. 2017; Ullmann et al. 2019; Jensen et al. 2020), and breast cancer (Alvarado et al. 2012; Delaloge et al. 2024). Retrospective studies suggest that patients with certain forms of early breast cancer, such as low-risk DCIS, may not benefit from surgery and may be overtreated (Sagara et al. 2015; Ryser et al. 2019). Trials to prospectively compare surveillance vs. treatment for early breast cancers, akin to those cited above in prostate cancer, are ongoing (Elshof et al. 2015; Francis et al. 2015; Hwang et al. 2019). However, these trials have had difficulty enrolling patients, in part because of an “ingrained behaviour of offering surgery” and the fact that “patients have been brought up to expect ‘cancer’ to be removed” (Wallis 2018: 377)—further evidence of the normative effects of the cancer diagnosis.

13. See Donovan et al. (2016), Pompe et al. (2017), and Corsini et al. (2024).

14. Several independent cohorts also confirm favourable outcomes in patients with low-risk prostate cancer managed with active surveillance; see, for example Klotz et al. (2015) and Tosoian et al. (2020).

Therefore, while it's true that treating certain cancers early reduces cancer deaths, it's widely recognized that these benefits trade off against the harms of overtreatment.¹⁵ And while it's true that, on a population level, one might justify a certain amount of overtreatment to reduce deaths from cancer, many experts worry that the pendulum has swung too far—they worry that the harms of overtreatment, too often overlooked, are not justified (Welch & Black 2010; Esserman et al. 2014; Dunn et al. 2022). It is this concern, combined with recognition of cancer's normative effects—how hearing “cancer” incurs fear and pressures patients to accept toxic interventions not appropriate for low-risk tumours (Dunn et al. 2013)—that motivates calls to relabel early cancers (Esserman et al. 2014; Nickel et al. 2017; Nickel et al. 2018; Eggener et al. 2022; Labbate et al. 2022).

To conclude this section, then, recognizing the normative force of diagnosis (John 2022), allows us to recharacterize the two dominant strategies for addressing cancer overdiagnosis and overtreatment. Both start from the premise that the normative force of the cancer diagnosis is a powerful driver of overtreatment and that it is unwarranted for a subset of early cancers.

The first I call the *restrictive strategy*. It aims to simply restrict the number of people subject to the normative force of a diagnosis. There are several means of doing this. One could, for instance, block opportunities for diagnosis by stopping unnecessary cancer screening and unnecessary tests more generally. Important initiatives such as “Choosing Wisely” and “Too Much Medicine” advocate such strategies.¹⁶

The second I call the *relabelling strategy*. As just discussed, it aims to change the diagnostic label, giving low-risk or early cancers a non-cancer designation, instead calling them risk factors or precancers. The relabelling strategy can be understood as an attempt to block the normative force of the cancer diagnosis, without changing the normative force itself. Advocated by influential voices in the field (e.g., Esserman et al. 2014, Nickel et al. 2018, Eggener et al. 2022), this strategy acknowledges the normative force of the cancer diagnosis but wishes to reserve it for a narrower class of speech acts. Proponents of this strategy cite evidence that relabelling reduces overtreatment.

Recognizing the normative force of diagnosis, however, also allows us to consider a third, hitherto underexplored option for addressing cancer overtreatment: revising the normative force of the cancer diagnosis itself. I call this the *revisionist strategy*.

15. See also Plutynski (2017), who discusses these trade-offs in cancer screening in terms of epistemic risk.

16. See e.g., www.bmj.com/too-much-medicine.

3. The Revisionist Strategy

3.1 *The Cancer Diagnosis*

Implementing a revisionist strategy first requires identifying what it is about the normative force of a diagnosis that needs revising. What is the normative force of “the cancer diagnosis”? As noted above, many observe that cancer carries significant “social implications,” which I now examine in more detail.

While John (2022) focuses on the general normative effects of the speech act of diagnosis—the most general being to make a person a potential patient—it is important to recognize that diagnosing specific diseases changes normative status in specific ways. Sticking with the judicial analogy, though any guilty verdict makes you a criminal, the normative force of the verdict is different for the murderer vs. the petty thief. Likewise for diagnosis. Different diagnoses, for example, might variously make you “a person deserving accommodation,” “a person requiring quarantine,” “a person needing institutionalization,” “a person eligible for euthanasia,” and so on. These may not always be encoded in law, as in the case of murder vs. petty theft,¹⁷ but these normative effects are nevertheless the product of rules and conventions, require special authority to enact, and have certain conventional effects, namely, to change a patient’s social status in specific ways (see Sbisà 2009). They are, in this way, constitutive of a given speech act of diagnosis—they are *illocutionary*, not *perlocutionary*.

We can usefully distinguish between diagnoses with strong and weak normative force. The diagnosis of onychomycosis, like a guilty verdict for petty theft, has rather weak normative force. It might make you the object of unwelcome attention at your local swimming pool, but it won’t inspire your colleagues to send you gifts and get-well messages or to run marathons in your name. By contrast, a diagnosis of cancer has strong normative force.

Think back to the fictional case of disease Y, the indolent lymphoma. Consider, for a moment, how strange it would be for your doctor to describe your diagnosis of cancer as “not too serious,” as she did disease X. Cancer is *not* something to be minimized. Most people still see cancer as a “death sentence” (Moser et al. 2021). Doctors consistently rank cancer as the most “serious” of diseases (Album et al. 2017). Medical trainees are warned to *never* downplay a diagnosis of cancer; to never, for example, reassure a patient that they have a “good cancer.” As one patient put it “No amount of reassuring words on how it is a ‘good cancer’ ... could console me” (Briggs 2016). Diagnosing cancer is always a grave affair. Patients need consolation, counselling, and support groups. For this reason, cancer clinics employ social workers, psychologists, and chaplains.

17. Though some are, such as restrictions and entitlements pertaining to quarantine, institutionalization, and euthanasia, in certain jurisdictions.

This much is clear about cancer's normative force: a diagnosis of cancer is never good. Nothing about the natural history and severity of a specific cancer changes this fact. The phrase "good cancer" is strange in the same way that the locution "a little bit of cancer" is puzzling. To be clear, there is no contradiction in these statements. We can all, of course, admit the possibility of having "a little bit of cancer," or of having "a not too serious" form. But the fact that these phrases still seem puzzling stems from the strong normative force of the cancer diagnosis. It reveals how the words *you have cancer* bring about particular normative effects, making you *a person with a serious disease*. Thus, having a doctor say, "You have cancer; but it's not too serious" is like having a judge say, "You are guilty of murder; but you don't deserve punishment." While logically possible, the latter qualifications are jarring in relation to the former's illocutionary force. *In being diagnosed with cancer, you become a person with a serious disease.*

That certain speech acts carry strong normative force is not itself a problem. Strong normative force often serves an important social function. Declaring someone guilty of murder—making them a murderer—*should* under most circumstances engender a view of them as "a person in breach of common morality," "a person deserving punishment." Likewise, during the height of the Covid pandemic, being diagnosed with the virus rightly made you "a person who should stay inside." But, ideally, the normative force of a speech act should remain tied to this social function; that is to say, its normative content and strength should be warranted by and proportional to this function.

What is the function of the speech act of diagnosis? There is no single answer to this question, as "diagnosis" can name different speech acts with different functions depending on the clinical context and nature of the condition diagnosed. In broad terms, however, we can say that an important function of a doctor's diagnosis is to alert the patient to a pathological condition that may have adverse consequences for their health, and for which medical treatment may be appropriate.¹⁸ Importantly, the function of a diagnostic speech act is *not* generally to encourage the patient to receive treatment *per se* (though this may be a perlocutionary effect), but rather to inform and, in some cases, to make them eligible for treatment. Diagnosis can serve other medical and social functions.¹⁹ Nevertheless, this description captures what many take to be a central function of diagnosis, which applies in the case of cancer.

18. This aligns with pragmatist accounts of diagnosis (e.g., Kukla 2022), which argue that diagnosing disease serves to identify a condition that qualifies as pathological (according to the epistemology and metaphysics of medicine), and for which it is strategically helpful to medicalize.

19. Diagnosis may serve explanatory functions, for example, explaining a patient's previously unexplained symptoms (see Cournoyea & Kennedy 2014). Nevertheless, many diagnoses (e.g., idiopathic or symptom-defined diseases) are not terribly explanatory (Stegenga 2018: 86–87). See also Maung (2019).

I just said that the normative force of a speech act should *ideally* remain tied to its function because there are, of course, speech acts for which this is not the case. Claims of disjunction between normative force and function often create controversy and arouse activism to revise normative force. Such claims feature centre stage in debates over medicalization. For example, many have challenged the normative force of “obesity” as a diagnostic label, arguing that it should *not* be taken to designate “a person who is unhealthy,” “a person who does not eat or exercise appropriately,” or “a person who would benefit from medical treatment” (see Mehl 2023). In response, defenders of the label argue that (some of) this normative force may be warranted and serves important social and medical functions (see Sholl & De Block 2024).²⁰

In the case of the cancer diagnosis, I argue that this has ceased to be the case: much of its normative content is *unwarranted* and its strength *disproportionate*.

3.2 *The Fighter Effect*

The revisionist strategy, which targets normative force as a means of reducing the harms of cancer overtreatment, focuses on a specific normative effect that I argue is unwarranted and disproportionate. This effect is best illustrated by the various military metaphors that surround cancer and its treatment. In the wake of Nixon’s declaration of *war* on cancer, Sontag (1978: 57) perceptively noted “the convention of treating cancer as no mere disease but a demonic enemy.” Still today, cancer patients *battle* this *invasive* enemy. Clinical trials *recruit* patients, cancer centres call upon them to *enlist*.²¹ Through *battle*, patients become either *victims* or *survivors*. But, above all, *they are fighters*. I call this normative force *the fighter effect*.

Naming the fighter effect takes cancer’s metaphors seriously. It shows how the speech act of diagnosing cancer enlists patients in war not merely in a metaphorical sense. It shows how the costs of desertion in this metaphorical war can, in fact, be rather concrete. This is because the fighter effect is part of the illocutionary force of the cancer diagnosis. *In being diagnosed with cancer, you become a fighter*.

Consider this opening of a television advertisement for a leading US cancer centre:

Patient 1: Everything just stopped.

Patient 2: Shocked, I was pretty shocked.

20. Sometimes, critics of the normative force of a certain speech act propose replacement with a new speech act with new normative force; in this example, activists propose the label “fat” to replace “obese” as a more neutral descriptor of body size. Normative force of a speech act, however, can also be revised without replacement, as in, for example, the label “queer.”

21. meyercancer.weill.cornell.edu/news/2016-03-21/war-cancer-enlist-now

Patient 3: And then, we wanted to *fight*.

Patient 4: And *win*.

Voiceover: *Because we have so many ways to fight...*²²

Or consider these excerpts from patients diagnosed with cancer, taken from the top five search results on Google:

When the consultant told me it was cancer, I was really upset, obviously, but then I thought: “Right I’ve just got to deal with this.”

I was overwhelmed and discouraged. I knew I didn’t want to wait, I wanted to take action. I wanted to get rid of this cancer in my body.

I’ve always been a strong person. My father had one expression when there was a problem: Handle it. He said, “You’ve been prepared to handle it, just handle it.” I’ve relied on that strength ...²³

Or consider still how such testimonies are prefaced on the website of another leading cancer centre:

We understand that no two cancer patients are alike, and neither is their treatment journey. Each patient’s journey, though, has some common traits: *strength, determination, persistence and sense of hope in the battle against cancer*.²⁴

These so-called “common traits” of cancer patients capture the normative force of the fighter effect:

Fighter effect. The normative effects, caused by a diagnosis of cancer, which makes a person into a fighter, expected to do battle with their cancer, and hence to exhibit *strength* (over weakness), *determination* (over passivity), *persistence* (over surrender), and, above all, *action* (over inaction).

The fighter effect shows how a cancer diagnosis moves a person into a category that carries built-in expectations—how they should face and respond to their disease—regardless of individual experience. It is this normative effect of the cancer diagnosis that I contend requires shifting.

22. [ispot.tv/ad/w5gn/md-anderson-cancer-center-confronting-cancer-how-to-fight?autoplay=1](https://www.ispot.tv/ad/w5gn/md-anderson-cancer-center-confronting-cancer-how-to-fight?autoplay=1); quoted in London and Kimmelman (2018).

23. Google search for “patient testimony cancer diagnosis” performed from Cambridge, UK on January 29, 2024.

24. [cancercenter.com/patient-stories](https://www.cancercenter.com/patient-stories); emphasis added.

Criticism of the fighter effect is not new. Nearly a half century has elapsed since Sontag called for a “liberation” from cancer’s metaphors. Yet the fighter effect has proved tenacious. Perhaps this is because it is not always harmful; it may be an important source of drive and solidarity for many patients today.²⁵ Perhaps this is because successive therapeutic advances in cancer—from the advent of chemotherapy and radiation to current day precision oncology—assimilate well to this metaphor. Cancer remains a “demonic enemy,” only our armouries have vastly expanded. Consider the 2001 *TIME* magazine cover featuring the new leukemia drug Gleevec: “There is new ammunition in the war against cancer. These are the bullets.” Whereas conventional chemotherapy sought to *carpet bomb* cancer, precision drugs are *snipers* (Kerr et al. 2021: 27).

Critics have pointed out how such language can harm patients with cancer (Malm 2016; Hauser & Schwarz 2015; 2020). The fighter effect is not benign, but rather directly contributes to the problem of overtreatment discussed above. It is through the normative force of the fighter effect that a cancer diagnosis becomes “a call to action,” compelling patients “to do something”—to become “good fighters,” rather than “victims” or “losers”—and mount a convincing response to “the enemy within” (Hansen 2018; Bodd et al. 2023). As we’ve already seen, however, this response is not always appropriate and, in the case of early cancers, often harmful.

In locating the fighter effect within the illocutionary force of the cancer diagnosis, I aim to go beyond existing voices that highlight the harm stale military metaphors do to cancer patients.²⁶ Seeing how these metaphors shape and are shaped by cancer’s normative force allows us to more clearly identify the mechanism through which they contribute to harm, in virtue of their constitutive role in the speech act of diagnosing cancer. This in turn reveals a key target for the revisionist strategy as a means of reducing these harms. It also exposes a major weakness for alternative approaches. Recall that the restrictive strategy seeks to limit the number of people diagnosed with cancer by curbing screening and testing, while the relabelling strategy aims to strip low-risk cancers of the cancer label altogether. Both strategies concede normative force to the C-word and thus leave the fighter effect untouched.²⁷ In contrast, the revisionist strategy directly

25. See, for discussion, Semino et al. (2017).

26. Some consider these military metaphors to be part of a broader class of “violence” metaphors that attach to cancer and have similar normative content (Demmen et al. 2015; Semino et al. 2017; Magaña 2020). Other metaphors, such as “journey” metaphors, have slightly different, less bellicose, normative content, though not all critics of violence metaphors agree that journey metaphors are preferable (e.g., Semino et al. 2017).

27. To be clear, the revisionist strategy does *not* propose to revise the restrictive and relabelling strategies but rather describes a different approach altogether. Whereas the latter two strategies accept that the speech act of diagnosing cancer carries certain illocutionary force and, in light of this, seek to modify our uses of the speech act, the revisionist strategy seeks to revise the speech act—the illocutionary force of the cancer diagnosis—itsself.

challenges the normative force of the cancer diagnosis. This leads me to the first of four reasons to favour the revisionist strategy for tackling cancer overtreatment.

4. Four Arguments for Revisionism

4.1 *It's Radical*

The first argument in favour of the revisionist strategy is that it is radical.²⁸ In seeking to displace the fighter effect, it targets a key driver of cancer overtreatment in a way that restrictive and relabelling strategies cannot.

Think back to the contrast between disease X and Y. Think specifically of the doctor's assertion that "many patients choose to live with disease X" vs. "many patients find it difficult to live with disease Y." Controlling for differences in disease severity and natural history, we'd find that the fighter effect is the key difference maker here. For any given cancer, regardless of stage and severity, the fighter effect emphasizes action over inaction, intervention over observation, in a way disproportionate to actual risk. The fighter effect's normative force thus undermines a key function of a cancer diagnosis, which is to inform patients about their pathological condition in a manner that enables them to weigh the risks and benefits of treatment—*not* to imply the need for "treatment at all costs" (Harrington 2012: 409).

This is evidenced by the fact that, even for early cancers where intervention is not indicated, patients face immense pressure to pursue treatment. For example, as discussed in §2.2, despite broad consensus that surveillance rather than treatment with surgery or radiation is preferred for low-risk prostate cancer, uptake of surveillance has been "disappointingly slow and heterogenous" (Berlin et al. 2023), with rates of surgery or radiation high as one hundred percent in some practice settings (Auffenberg et al. 2023; Cooperberg et al. 2023).

Several factors could contribute to this pattern, including financial incentives that reward intervention over surveillance, concerns about malpractice liability, and institutional inertia that favours established treatment pathways. However, qualitative research suggests that the normative force of cancer is a key driver of overtreatment (Xu et al. 2012; Le et al. 2016; Brooks et al. 2018; Pattenden et al. 2024). Consider these remarks from physician participants in one study:

Some patients just don't feel comfortable knowing that they were diagnosed with cancer and saying, "okay. We're just going to watch it." ...

28. My choice of the term "radical" takes inspiration from Rose (1985), referring to an approach which targets an underlying or root cause.

that's a big thing that a lot of the patients have a hard time struggling with is saying, "well I was just diagnosed with cancer. Aren't we going to do anything about it?"

When people hear the word cancer, they really freak out. Getting them to accept that this can be kind of a chronic issue ... that's the biggest barrier that I can see with these patients getting on AS [active surveillance]. (Brooks et al. 2018: 1721)

Or, as one patient succinctly put it, "I have to do some sort of treatment ... *something has got to be done*" (Xu et al. 2012: 766, emphasis added).

This pressure towards action is further evidenced by the reluctance to refer to observation in passive terms. Terms like "watchful waiting" are replaced by "active surveillance"; or, in the era of precision oncology, "precision surveillance," furthering metaphors of military intelligence. The cancer diagnosis makes someone a person who takes *action against* (n.b., rather than *treatment for*) their disease; or, at the very least maintains a rigorous surveillance regime, remaining poised for a "preemptive strike" (Douer 2004). A diagnosis of cancer is "a call to action" (Fagerlin et al. 2005: 3111).

By leaving the fighter effect unchallenged, the restrictive and relabelling strategies fail to target this key difference maker in overtreatment. The restrictive strategy, by limiting those exposed to screening or testing, indeed modifies an important upstream cause of overdiagnosis; but it leaves a key downstream cause of overtreatment unaltered. Therefore, when early cancers are detected, as they inevitably still are, patients are still subjected to the full normative force of the fighter effect. This sustains the common impression that failing to take action against an incidentally discovered, early-stage cancer is tantamount to "burying one's head in the sand," to quote another patient (Chapple et al. 2002: 259).

Likewise, the relabelling strategy concedes normative force to the fighter effect. There is some evidence that relabelling might help prevent overtreatment. For example, calling the early breast tumour DCIS a "breast lesion" or "abnormal cells" rather than "breast cancer" led fewer women to opt for surgery, despite being presented with identical information on risks and benefits (Omer et al. 2013). Similarly, giving early prostate cancer a non-cancer label—in this case, the unwieldy acronym "prostatic acinar neoplasm of low malignant potential (PAN-LMP)"—led more men and their partners to choose surveillance over aggressive treatment (Berlin et al. 2023).²⁹

29. See also Nickel et al. (2018) and Dixon et al. (2019) for similar studies in different cancers.

On the one hand, this might seem to count in favour of the relabelling strategy, providing evidence that blocking, rather than displacing, the fighter effect is sufficient to prevent overtreatment. On the other hand, however, it reveals that it is, in fact, the fighter effect doing the bulk of the work in driving overtreatment. As proponents of prostate cancer relabelling themselves put it, “The ‘cancer’ label elicits strong instincts toward radical treatment even when it does not provide any oncologic benefit” (Berlin et al. 2023: 1368). But why leave this supposed “misperception” unchallenged?³⁰

This is akin to a public health officer, dismayed by widespread misperceptions attached to the term “vaccination,” choosing to just call it something else, rather than addressing the underlying causes of vaccine hesitancy. Taking lead from her oncology colleagues, she might opt for an equally cumbersome (but perhaps catchier) acronym, say “biological immunity boosting with bonafide, longitudinally established safety (BIBBLES).” Clearly, simply replacing “vaccination” with “BIBBLES” skirts the issue.

Here one might object that the normative force of cancer is too entrenched to change—that it lies beyond the power of physicians to revise. Relabelling, while it may not address the root causes of overtreatment, is at least a practical stopgap within their control. I take up this objection more fully in §5.1, but for now, I’d note that the normative force of the cancer diagnosis is not immutable. Though shaped by broader social forces, its weight and authority stem from medical institutions, professional discourse, and clinical practice—where physicians play a key role. Moreover, conceding to cancer’s current normative force risks reinforcing it. Stripping the cancer label from select cases tacitly affirms that its existing force is justified where the label remains, entrenching the very problem relabelling seeks to avoid. Just as rebranding “vaccination” as “BIBBLES” might boost uptake while legitimizing fear of vaccines, relabelling cancer sidesteps the problem rather than challenging it—ultimately cementing the very norms it aims to dismantle.

Recognizing a misperception that adversely impacts decision making is reason to dispel the misperception, rather than simply block its effect. When it comes to cancer treatment, a better situation would be one in which decisions are influenced by information on risks and benefits, rather than the diagnostic label. This leads me to the second argument for the revisionist strategy.

4.2 *It’s Rational*

The second argument in favour of the revisionist strategy is that it promotes rational decision making in the decision-theoretic sense of allowing choices that maximize expected value for the decision maker. Cancer relabelling studies

30. Omer et al. (2018: 1830).

often characterize patients' choices of aggressive treatment for early cancers as not only rooted in misperception but also as under the influence of "impulse," "emotion," or "cognitive bias" (Omer et al. 2013; Nickel et al. 2018; Berlin et al. 2023). There's a tendency to think that the cancer label somehow impairs or constrains rational decision making.³¹ Choosing surgery over observation for a "cancer" vs. "lesion" despite that choice having the same, or even worse, outcomes is seen as irrational, even "paradoxical" (Dixon et al. 2019). It seems, then, that relabelling *promotes* rational decision making. This conclusion, however, is too hasty, for it does not consider the normative effects of the cancer diagnosis.

For the sake of argument, let's assume that all patients are perfectly rational decision makers. Specifically, let's assume that for any given decision their choices maximise expected value—the sum of all possible outcomes, each weighted by its probability and the subjective value assigned to it by the decision maker. Consider a simplified scenario, where a patient is asked to choose surgery (S) or watchful waiting (W) for a "lesion" vs. "cancer." Surgery is always curative but incurs an upfront risk of surgical complications. Watchful waiting has no upfront risks but incurs a future risk of progression. There are four possible outcomes, $O = \{O_1, O_2, O_3, O_4\}$, where

- O_1 = cure with surgical complications
- O_2 = no cure with surgical complications
- O_3 = cure without surgical complications
- O_4 = no cure without surgical complications

In this example, we can say that $P(O_2|S) = 0$ and $P(O_4|S) = 0$ because surgery is always curative.³² We can also say $P(O_1|W) = 0$ and $P(O_2|W) = 0$ because watchful waiting involves no surgical complications. Starting with the case where a patient is presented with a "lesion," we can calculate the expected value (EV) of choosing surgery vs. watchful waiting:

LESION

$$EV(S) = P(O_1|S) \cdot V(O_1) + P(O_3|S) \cdot V(O_3)$$

$$EV(W) = P(O_3|W) \cdot V(O_3) + P(O_4|W) \cdot V(O_4)$$

where $V(O_i)$ are the values attached to each outcome. Given that patients' choices maximize expected value, they will opt for surgery iff $EV(S) \geq EV(W)$. We might, then, wish to assume (as researchers sometimes do) that $V(O_i)$ should remain constant for all outcomes if "lesion" is simply replaced with

31. Note that results of cancer relabelling studies do not necessarily support this conclusion.

32. I assume this for simplicity; however, the argument applies even if this were not the case.

“cancer,” since, ostensibly, the information on risks and benefits remains the same.³³ That is to say, relabelling causes no informational change in the decision problem. The only thing that changes is the diagnostic label. Therefore, the decision faced in LESION is the same as the decision faced in CANCER:

CANCER

$$EV(S) = P(O_1|S) \cdot V(O_1) + P(O_3|S) \cdot V(O_3)$$

$$EV(W) = P(O_3|W) \cdot V(O_3) + P(O_4|W) \cdot V(O_4)$$

CANCER and LESION give formal representations of the types of decisions tested in empirical studies on cancer relabelling.

Assuming that decisions made in LESION reflect patients’ *true* preferences (as researchers, again, sometimes do³⁴), then the empirical finding that more patients choose surgery in CANCER vs. LESION is taken as evidence of irrationality: in some cases, patients opt for surgery despite $EV(S) < EV(W)$. Findings like these, where patients presented with “cancer” choose options with (supposedly) lower expected value, are interpreted as “paradoxical” (Dixon et al. 2019), to be explained by “impulse” or “emotion.” The word “cancer,” researchers say, induces “fear or anxiety” that “cause patients to have more difficulty making informed decisions” (Nickel et al. 2017: 9).

But let’s continue to resist this conclusion and assume that patients remain perfectly rational, even when faced with the cancer label. To explain the decision to opt for more surgery when faced with “cancer” vs. “lesion,” we can introduce an additional factor in decision making. Let’s call this factor *illocutionary incongruence*. Illocutionary incongruence captures the *disvalue* of inaction in the face of a cancer diagnosis—the costs of failing to conform to expectations created by the fighter effect. These costs arise from both external pressures—expectations from physicians, family, and society—and internalized pressures, which can generate feelings of guilt, anxiety, or a sense of failure when a patient chooses not to *fight* the disease.³⁵ In short, in a world where a cancer diagnosis demands *strength*, *determination*, and *action*, doing nothing—even when medically justified—carries social and psychological costs. To take these costs into account, we must now consider eight possible outcomes $O^* = \{O_1, O_2, O_3, O_4, O_1^*, O_2^*, O_3^*, O_4^*\}$, where

$$O_i^* = O_i \text{ with illocutionary incongruence}$$

33. Of course, this may be untenable; however, I stick with this assumption because it is what grounds the claim that patients choose irrationally when presented with the cancer label.

34. See e.g., Omer et al (2013: 1830): “These results suggest that many women may prefer non-surgical options if allowed to weigh each choice and its attendant risks.” See also Nickel et al. (2018).

35. See Dworkin (1982: 51) for discussion of costs incurred by “pressure to conform.” See also Bicchieri (2005) for an account of social norms and their influence on decision making.

We can say that $P(O_i^* | S^*) = 0$ for all O_i^* in O^* , since choosing surgery for cancer is *congruent* with the expectations created by the fighter effect. So the fighter effect has no impact on the expected value of surgery, $EV(S^*) = EV(S)$.

However, the expected value of watchful waiting with the fighter effect, $EV(W^*)$, does change. We can say that $P(O_i | W^*) = 0$ for all O_i in O^* because choosing watchful waiting for cancer is *incongruent* with the fighter effect. $P(O_1^* | W^*) = 0$ and $P(O_2^* | W^*) = 0$ because, again, watchful waiting involves no surgical complications. Now, the decision of surgery vs. watchful waiting when presented with “cancer” looks like this:

CANCER FIGHTER

$$EV(S^*) = P(O_1 | S^*) \cdot V(O_1) + P(O_3 | S^*) \cdot V(O_3)$$

$$EV(W^*) = P(O_3^* | W^*) \cdot V(O_3^*) + P(O_4^* | W^*) \cdot V(O_4^*)$$

CANCER FIGHTER gives a formal representation of the same decisions represented in CANCER and LESION but considers the illocutionary force of the cancer diagnosis. It explains why rational patients presented with “cancer” opt for more surgery: they do so whenever $EV(S^*) > EV(W^*)$, even if $EV(S) < EV(W)$. The apt comparison is not between LESION and CANCER but rather between LESION and CANCER FIGHTER. Comparing maximum expected value of decisions in both scenarios, we can say

$$EV_{\max \text{ LESION}} = \text{Max}(EV(S), EV(W))$$

$$EV_{\max \text{ CANCER FIGHTER}} = \text{Max}(EV(S^*), EV(W^*))$$

Since incongruence is disvalued, $V(O_i^*) < V(O_i)$. Therefore, all else being equal, $EV(W^*) < EV(W)$. Assuming that surgery (S^*) is not universally preferred in CANCER FIGHTER, i.e., that there is a non-zero probability that a patient chooses watchful waiting (W^*), then we can say

$$EV_{\max \text{ LESION}} > EV_{\max \text{ CANCER FIGHTER}}$$

How does this support revisionism? At best, it shows equivalence of revisionist and relabelling strategies as the revisionist seeks to eliminate the disvalue generated by illocutionary incongruence—revisionism by turning CANCER FIGHTER into CANCER and relabelling by turning CANCER FIGHTER into LESION. In both cases, patients are spared the disvalue of illocutionary incongruence, allowing them to make choices with higher expected value for them.

But the advantage of revisionism over relabelling is that it maximizes *total* expected value when we consider a population of decision makers. Relabelling proponents do not seek to relabel *all* cancers but only a subset of early-stage can-

cers. They don't deny that some things should still be called cancer, and therefore that some patients will still be subject to the fighter effect. So, even if relabelling succeeds in changing decisions from CANCER FIGHTER to LESION for a subset of early-stage cancers, many patients will still find themselves in CANCER FIGHTER, namely those patients whose cancers are not relabelled. In other words, while the expected value may be equivalent for relabelling and revisionism for an individual decision maker who has their early-stage cancer relabelled, in a population of decision makers, individuals diagnosed with cancer will still find themselves facing CANCER FIGHTER, with the added disvalue of illocutionary incongruence.

To illustrate this, consider a population of patients with cancer, Pop_{cancer} . The relabelling strategy chooses to relabel a subset of early-stage cancers as "lesions," Pop_{lesion} . Its complement, Pop_{lesion}^C (e.g., later-stage cancers, or those not clearly at very low risk of progression) are not relabelled. From a population perspective, the total expected value of the relabelling strategy is

$$EV_{total\ RELABELLING} = EV_{max\ LESION} \cdot Pop_{lesion} + EV_{max\ CANCER\ FIGHTER} \cdot Pop_{lesion}^C$$

By contrast, the total expected value of the revisionist strategy from this population perspective is

$$EV_{total\ REVISIONISM} = EV_{max\ CANCER} \cdot Pop_{cancer}$$

Since we've established that for all members of Pop_{cancer}

$$\begin{aligned} EV_{max\ LESION} &> EV_{max\ CANCER\ FIGHTER} \\ EV_{max\ CANCER} &= EV_{max\ LESION} \end{aligned}$$

then it follows that

$$EV_{total\ REVISIONISM} > EV_{total\ RELABELLING}$$

From a population perspective, the revisionist strategy leads to greater expected value than the relabelling strategy.³⁶ Moreover, since the revisionist strategy leaves members of Pop_{lesion}^C better off than under the relabelling strategy, and since no members of Pop_{cancer} are made worse off, we can say that moving from

36. This is true for both *total* and *average* value, i.e., $EV_{total\ REVISIONISM} / Pop_{cancer} > EV_{total\ RELABELLING} / Pop_{cancer}$. Of course, maximizing total and average value in a population is not automatically the most desirable. One might also, for instance, care about the *distribution* of value in a population. However, in this particular case there's no compelling reason to prefer a distribution where expected value is higher for Pop_{lesion} vs. Pop_{lesion}^C . So, in this case, revisionism also seems preferable on egalitarian grounds.

relabelling to revisionism constitutes a Pareto improvement. Choosing revisionism over relabelling is the rational choice.

4.3 *It's Respectful*

The third argument in favour of the revisionist strategy is that it respects patient autonomy. While the previous argument focused on rational decision making in the decision-theoretic sense—how revisionism allows patients to make choices with higher expected value—this argument concerns rationality in the autonomy sense: ensuring that patients are free to make choices that genuinely reflect their preferences and values, without undue constraint. By aiming to displace the fighter effect, the revisionist strategy respects autonomy in decision making in a way that the relabelling strategy does not. This provides another compelling reason to pursue revisionism. Consider an illustrative case.

COURGETTE. Imagine you have a British friend, Betty, who hates courgette. She has a longstanding fear that eating courgette will cause her serious illness. Needless to say, this fear is unsubstantiated. She's not allergic or intolerant; she simply has a deep-seated fear of eating courgette. As her friend, you worry that forgoing courgette is adversely affecting her life—that she is missing out on the joys of homemade courgette cake and oven roasted ratatouille. So, one evening, you prepare Betty your finest ratatouille. Knowing that Betty hates courgette, when she asks, "What's in your ratatouille?", you list the ingredients but strategically say "zucchini" in lieu of "courgette." (Betty, schooled in British English, is unfamiliar with courgette's Italian-influenced American synonym.) She eats your ratatouille.

In this case, it's plain that you've deceived Betty. In so doing, you've prevented her from making an autonomous decision about whether or not to consume your ratatouille given her preferences. You might still think that Betty's fear of courgette is baseless, that her decision to forgo ratatouille is uninformed. But this does not justify your deceit. A better friend would target Betty's fear of courgette, rather than tricking her into eating zucchini.

The revisionist strategy does exactly that: it seeks to unseat the disproportionate fear causing Betty to avoid courgette. The relabelling strategy, by contrast, would have Betty eat zucchini. You might opt for the latter if Betty were instead your four-year-old daughter, in need of encouragement to eat her greens. But for an adult making her own choices, revisionism allows her to decide—without unnecessary fear—whether to keep avoiding courgettes.

I'm not the first to charge the relabelling strategy with paternalism.³⁷ Standard examples of paternalism in bioethics involve doctors withholding information from a patient to encourage particular beliefs or actions that they think will benefit the patient (see Groll 2014). The worry is that the resulting informational asymmetry interferes with patient autonomy in decision making. The relabelling strategy raises similar worries. Physicians have argued that renaming cancers denies patients' "right to autonomy" and constitutes "paternalistic control of patients" (Burke 2022). Members of the public have voiced similar concerns that the act of relabelling is in some way deceitful (Nickel et al. 2019).

Paternalism here rightly evokes suspicion. However, it is not a knockdown argument against the relabelling strategy. One might think COURGETTE too crude an analogy. Some forms of paternalism, after all, may be justified and need not conflict with autonomy (c.f., Sunstein & Thaler 2006).

The relabelling proponent, therefore, might respond to the charge of paternalism in one of two ways. First, they might reject the charge. Second, they might accept it, but retort that it is not a problematic paternalism, and that it is somehow justified. I'll consider each response in turn to show that, regardless of whether one thinks relabelling paternalistic, revisionism still comes out on top in terms of respect for autonomy.

The first response is to doubt that cancer relabelling is in fact paternalistic. A simple way to think about the relabelling strategy is that it somehow removes an option. Betty's not knowing that ratatouille contains courgette removes her option of forgoing the dish given her preferences. Likewise, relabelling cancer could be seen as removing the option of having treatment. Women are not offered mastectomies for mere "lesions" or "abnormal cells."

But is eliminating an option always paternalistic? Is more choice always conducive to autonomy? No, says Velleman (1992). He argues against, for example, offering patients the choice of euthanasia because, plausibly, having this choice leaves some patients worse off *with respect to their own autonomy*. The example bears some resemblance to the cancer case so is worth considering. Velleman worries that, if offered euthanasia, patients may face undue pressure to exercise that choice. They might, for example, face pressure from society, friends, and family to pursue euthanasia given the financial, social, and emotional costs of prolonging their life. Some patients would be better off, Velleman argues, *with respect to their own autonomy* if they were *not* offered this choice.³⁸

Consider a slightly less charged example.³⁹ A bank teller, we might think, is better off *not* knowing the safe combination and, therefore, *not* having to choose whether to open it when threatened by an armed robber. It's not clear, how-

37. See, for discussion, Reid (2017) and John (2022).

38. See, however, Flanigan (2017: 71–72) for counterargument.

39. Due to Dworkin (1982: 55).

ever, that removing the teller's choice is paternalistic or somehow detracts from his autonomy.

Similarly, one might resist calling cancer relabelling paternalistic. It seems plausible that some patients would be better off *not* having to choose between surgery vs. observation for early cancer, sparing them the normative force of the fighter effect and worries of illocutionary incongruence.

But insofar as such cases convince us that constraining choice does not always come at a cost to autonomy, they also reveal which states of affairs would be *most conducive to autonomy*. While it's true that the teller not knowing the safe combination may be better for him, it's also obvious that *not* encountering an armed robber would be best. Evidently, not being robbed at gunpoint is *most conducive to autonomy*. Likewise for euthanasia, Velleman (1992: 675) would likely agree patients *not* being pressured to end their own lives—doing away with our culture's hostility towards “passivity and dependence,” as he puts it—would be best. This is what revisionism tries to achieve with respect to the normative force of the cancer diagnosis. So even if the relabelling proponent does not think relabelling is paternalistic or impairs autonomy, they have to agree that revisionism is *most conducive to autonomy*.

The second response is to accept the charge of paternalism. The relabelling proponent might, for instance, accept the charge but choose to reframe it more positively as an example of epistemic paternalism. Epistemic paternalism refers to non-consultative interference in communication undertaken with ameliorative intent, that is, for the epistemic benefit of one's audience (Goldman 1991; Ahlstrom-Vij 2013). Along these lines, a proponent of relabelling might argue that calling DCIS a “breast lesion” rather than “breast cancer” may help patients better grasp the risks and benefits of treatment without the disproportionate fear generated by the C-word or expectations created by the fighter effect. Indeed, this might be another way to interpret the results of the cancer relabelling studies discussed in §4.1.

However, this epistemic justification is weak. As we've already seen, any clarity gained from relabelling benefits only patients whose cancers are relabeled as “lesions” ($\text{Pop}_{\text{lesion}}$), while patients still labeled as having “cancer” ($\text{Pop}_{\text{lesion}}^{\text{C}}$) remain subject to the full normative force of the C-word. Even if relabelling helps some patients better weigh treatment risks and benefits, it does so at the expense of clarity for others. While one might argue that the fighter effect is warranted in cases that retain the cancer label, it remains an imposed expectation that can distort decision-making. This is especially true when it comes to the overtreatment of late-stage cancers, which I touch on below. By leaving the fighter effect intact, the epistemic benefits of the relabelling strategy remain asymmetrically distributed.

Therefore, even those not dismayed by paternalism, who argue for its epistemic justification, must face the fact that this justification for the relabelling strategy is rather weak. The approach most respectful of patient autonomy is the revisionist strategy, which strives for a more neutral framing for all patients.

4.3 *It's Robust*

The fourth argument in favour of the revisionist strategy is that it is more robust than the alternatives. By robust, I mean that it is more resilient to changes in factors that drive overtreatment across space and time.

Consider controversies generated by the restrictive strategy, such as attempts to modify eligibility criteria in cancer screening guidelines. Most (in)famous among these were the so-called “mammography wars,” sparked by attempts to restrict mammography for breast cancer screening to women aged fifty or older in order to prevent overdiagnosis and overtreatment. By the 2010s, various arguments from various stakeholders caused this seemingly scientific dispute to escalate into a full-scale “war,” waged in popular media from *The New York Times* to *The Wall Street Journal*.⁴⁰ Tensions resurface with each successive screening guideline (Friedman 2023), and are not limited to breast but extend to other organs as well, from lung to colon to prostate.

The medical community is deeply conflicted over how to implement the restrictive strategy. It is conflicted in two senses. First, there is genuine conflict about how to interpret the evidence, seen in debates over choice of outcome measures or magnitude of benefit in cancer screening trials.⁴¹ Second, there are conflicts of interest at play, compounding existing uncertainties. Studies show that more aggressive screening guidelines are often influenced by professional and financial conflicts of interest.⁴² But even setting aside conflicts in existing guidelines, adherence to screening varies widely in practice. While some screening tests are underutilized in certain populations, others face the opposite problem. Clinicians are often free to ignore guidelines based on their own professional biases and interests (Adami et al. 2023). Decisions to screen are frequently influenced by idiosyncratic factors, rather than by discussion of risks and benefits and informed consent (Justman 2012). Therefore, while some form of restrictive strategy is no doubt needed to prevent overdiagnosis, it remains vulnerable to variable implementation owing to a range of factors that change across space

40. See, for discussion, Friedman (2023).

41. See, for example, Saquib et al. (2015) and Powell & Prasad (2023). See also, for philosophical discussion, Plutynski (2017).

42. See, for example, Norris et al. (2012) and Rasmussen et al. (2012).

and time. New technologies for early cancer detection, such as simple blood tests marketed directly to consumers, only exacerbate this worry.⁴³

Relabelling might seem more robust than restriction. Even if we can't prevent doctors from ordering unnecessary mammograms, we can at least prevent doctors and patients from acting on their findings by calling them "lesions" rather than "cancers." But on closer inspection, this too is a rather fragile barrier to blocking the normative force of the cancer diagnosis. Euphemisms for early cancer, such as "indolent lesion of epithelial origin (IDLE)," inevitably lead patients to ask the predictable question—*so, is it cancer or is it not?*—to paraphrase one patient (Kennedy et al. 2012). Members of the public likewise worried that the relabelling strategy might fail and undermine trust if patients later found out that their "lesion" was previously called "cancer" (Nickel et al. 2019), a worry supported by qualitative research on patients with early cancer.⁴⁴ In such cases, the full normative force of the C-word re-enters the decision making process—often with a vengeance. When Betty googles "zucchini," she will not be pleased (to put it mildly).

The relabelling strategy, therefore, is not robust. In contrast, the revisionist strategy, in virtue of being *radical*, that is to say, by targeting a key downstream driver of overtreatment, is *robust* against perturbations in testing regimes and idiosyncrasies of clinical practice. Of course, no large-scale normative change happens overnight. The transition away from the fighter effect may be gradual, with its influence lingering in some contexts or communities. But even in these early stages, revisionism is preferable to a strategy that not only leaves the problematic normative force of the cancer diagnosis intact but risks further entrenching it. Relabelling, by sidestepping the issue, is vulnerable to collapse under scrutiny; revisionism, by contrast, directly challenges the fighter effect and, where successful, allows patients to make treatment decisions free from interventionist pressures. Together, these four arguments show the revisionist strategy to be at once *radical*, *rational*, *respectful*, and *robust*, making a compelling case for adopting this approach. Next, I address three possible objections.

5. Objections

5.1 *But it's Infeasible*

The first objection is that the revisionist strategy is infeasible. I acknowledge that any strategy requiring broad normative shifts is *prima facie* less feasible than

43. See, for discussion, Cifu (2024).

44. As one patient remarked, "we've found out more from [the internet] because the consultant ... would say was 'no, no it's not cancer...' yet the information that you actually find out is that it is" (Kennedy et al. 2011: 860).

those requiring only changing a name in a classification, or eligibility criteria in screening guidelines. That being said, while the revisionist strategy may seem more challenging than the other approaches, this does not mean it is *infeasible*.

It is a general feature of illocutionary force of a speech act that it can be subject to revision. Consider again John's (2022: 2) judicial analogy. During a certain time and place, a judge declaring a person a homosexual carried the normative force to designate that person a criminal, a sexual miscreant, or both. Today, in many places, this force is no longer. Reasons for this change are no doubt complex, as they are heterogeneously and incompletely realized. But the example illustrates how the normative force of a speech act is not carved in stone. Rather, it is a product of social and cultural norms. Though seemingly entrenched, such norms can be changed.

As speech acts, medical diagnoses are no exception. In fact, shifts in the normative force of a diagnosis are rather common. In December 2019, in many countries, having a diagnosis of Covid made you a dangerous novelty. Facts about the disease, from changes in prevalence and severity, to understanding its transmission and risk factors, to developments in vaccination and treatment, all dramatically shifted what it meant to be a Covid patient in December 2023.

Such shifts are not limited to infectious diseases. Returning to Sontag, it's notable that we have, in fact, shed many metaphors of cancer that she so lucidly documented in her 1978 essay. In most places today, it would be strange to think of having cancer as indicating a flawed personality, beset with repressed emotions owing to excessive conformity—meanings once tied to a diagnosis of cancer. This suggests that the illocutionary force of the cancer diagnosis is not fixed. While diagnostic speech acts have the power to change a person's normative status, what that change entails—whether it casts them as a fighter today or as an emotionally repressed individual in the past—depends on broader medical, social, and cultural norms. That these norms have shifted over time show the revisionist strategy to be feasible.

Here a proponent of relabelling might respond that revisionism, though feasible, is impractical. Yes, relabelling can only block normative effects. Nevertheless, in virtue of being more easily implemented, it remains an important, if imperfect, measure to address the growing harms of overtreatment. This argument places the relabelling strategy alongside other public health interventions favoured for their expediency. Though it may be better for teenagers to realize that smoking is bad for them, banning cigarette sales to youth is a necessary measure. However, as I've argued above, this type of paternalism is not justified when it comes to deciding cancer treatments.

This response also raises the question of whether and to what extent relabelling and revisionist strategies conflict. A proponent of relabelling could, for instance, advocate relabelling as a stopgap measure to prevent overtreat-

ment while endorsing a broader revisionist agenda. Relabelling, however, may undermine revisionism. One worry is that it furthers the impression that cancer is *too bad to name* (e.g., Brown 2019). Calling Voldemort *He-Who-Must-Not-Be-Named* might temporarily allay anxiety, but it only promulgates his notoriety.

This worry is made clearer by appreciating how illocutionary force is the product of rules and conventions within a social practice (Sbisà 2009; see also Millikan 2005: 139–165). Insofar as relabelling reserves the cancer label for cases where its existing normative effects are perceived as warranted, it sanctions those normative effects, reinforcing the existing illocutionary force of the cancer diagnosis. Since relabelling abides by current conventions that surround the speech act of diagnosing cancer, it risks being counterproductive to revisionism.

Revising the normative force of the cancer diagnosis instead requires changing social practices—changing the rules and conventions surrounding the speech act of diagnosing cancer. The social practices that shape the illocutionary force of the cancer diagnosis are widespread. They are not limited to how doctors talk about cancer in the clinic but also extend, as we have seen, to how cancer centres recruit patients, organizations attract funding, awareness campaigns portray disease, and pharmaceutical companies market drugs (Woloshin et al. 2012; London & Kimmelman 2018; Ho 2021). And, as Sontag so vividly shows us, they extend even further to how “battles” with cancer are represented in media and culture. All these practices shape social expectations surrounding cancer, and thus the normative force of its diagnosis.

Revising pervasive social practices is nevertheless possible. Literature on shifting social norms offers resources to would-be revisionists. Bicchieri et al. (2016), for example, examine the processes behind changing or abandoning social norms, which begins with identifying a normative expectation (e.g., *patients with cancer should fight aggressively*), recognizing a discrepancy between this public expectation and private beliefs (e.g., *I should fight aggressively* vs. *I wish to make my own, informed decision about treatment*), and then encouraging new behaviours that challenge the existing expectation through public campaigns, adoption by community leaders, and support from relevant institutions.

Though only one part of this process, institutional changes within oncology are key to revising expectations surrounding the cancer diagnosis. Some changes are already taking shape through initiatives that broadly align with a revisionist agenda. For example, a focus on shared decision making, which emphasizes the importance of tailoring healthcare decisions to individual preferences and values (Kane et al. 2014), is a welcome development towards ensuring that treatment decisions in oncology respect patient autonomy while guarding against overly aggressive treatment (cf., Chapple et al. 2002; Nelson et al. 2020). State-

ments about shared decision making are increasingly included alongside treatment recommendations in influential clinical practice guidelines in several cancers (Sanda et al. 2018; Gennari et al. 2021; Morris et al. 2023).⁴⁵ Though some worry this is mere “lip service” (Scholl et al. 2020), such statements by major professional organizations are not trivial. They represent public avowals by leading oncologists to signal that cancer, like any other disease, is a condition where treatment decisions should be guided by individual preferences rather than interventionist pressures.

Admittedly, limited to guidelines, such statements may do little to address barriers to adoption of shared decision making in oncology practice (Kane et al. 2014; Scholl et al. 2020; see also Sanatani & Muir 2023). Nevertheless, if paired with initiatives focused on implementation in patient care, such as integration of patient decision aids and support tools into clinical workflows (e.g., Salwei et al. 2023), then it could help further the revisionist agenda.⁴⁶ Again, while changes within oncology are a useful starting point, for revisionism to succeed, they must be paired with wider initiatives and campaigns to address broader social practices and reshape public messaging about cancer.

5.2 *But it Helps Patients*

The second objection to the revisionist strategy argues that the fighter effect helps patients more than it harms. This sentiment in part explains the origins

45. For example, recent guidelines for the treatment of early prostate cancer emphasize, “SDM [shared decision making] is especially relevant in discussion of prostate cancer treatment because such decisions involve multiple clinically accepted options, and the ratio of benefits to harms is uncertain, equivalent, or ‘preference sensitive.’ SDM aims to improve the quality of medical decisions by helping patients choose options consistent with their own values and in accordance with the best available scientific evidence” (Sanda et al. 2018: 684). Recent guidelines for the treatment of metastatic colorectal cancer also emphasize shared decision making; for example: “Shared decision making is recommended, including a discussion of the potential for benefit and risk of harm; while survival and recurrence outcomes are improved ... adverse events are more frequent with triplet chemotherapy, compared with doublet chemotherapy” (Morris et al. 2023: 679). However, the inclusion of shared decision making in oncology guidelines is not yet universal, and recommendations may also exhibit gender bias (see Rivera-Izquierdo et al. 2023).

46. Certain types of decision aids, such as “conversation cards” (e.g., Volk et al. 2018), could work to explicitly change conversational norms surrounding the cancer diagnosis, encouraging patients to ask very specific questions regarding their treatment. Standard questions to support shared decision making include: “What are the benefits?”, “What are the risks?”, “What are the alternatives?”, and, importantly, “What if I do nothing?” (Ross et al. 2018: 2). This final question, though currently challenging to ask in the context of a cancer diagnosis (Nelson et al. 2020), always merits asking. Embedding such questions into routine clinical conversations surrounding cancer treatment could help create new normative expectations that are more conducive to patient autonomy in decision making.

and persistence of the fighter effect, which challenges cancer's earlier metaphors of conformity and passivity (Sontag 1978: 46). By this argument, the normative force of the fighter effect functions to impel cancer patients to action, jolting them from their supposed apathy.

While some patients may find solace in cancer's battle metaphors,⁴⁷ on a general level, this function is otiose. The fighter effect might serve as a source of strength for some patients, providing the resolve to get through a difficult treatment cycle or stimulus for early intervention. As discussed in §2.2, in certain cancers, early treatment is important for reducing cancer mortality. But the fighter effect is *not* needed to achieve these benefits. Where early intervention is warranted in cancer, like in any other disease, patients should be enabled to choose treatment based on the weight of the evidence for its benefits—*not* based on the expectation that they should “fight tooth and nail” (Magaña 2020: 652), and pursue “treatment at all costs” (Harrington 2012: 409).

A man with early prostate cancer should choose to have his prostate surgically removed because he has considered the benefits of surgery (i.e., reduction in his risk of dying from prostate cancer), weighed against its potential harms (e.g., perioperative death, pain, urinary incontinence, erectile dysfunction, etc.), and the fact that his cancer might never progress in his lifetime. This is not an easy decision. The considerations are complex and must take into account probabilities of numerous outcomes and the values the patient attaches to each. Guidance by a clinician knowledgeable in these outcomes, who can ascertain the patient's values and engage in shared decision making, is critical (Sanda et al. 2018). At the end of the day, there may still be significant uncertainty about the “right” decision for the patient. However, this much is clear: the fighter effect does *not* help. As I've argued above, by pressuring patients towards action, the fighter effect is counterproductive to the aim of allowing patients to make informed treatment decisions that carefully consider the risks and benefits.

Moreover, one need not look far to also see other harms of the fighter effect. Consider this reflection on the fighter effect from a patient with late-stage cancer: “It implies that ... if I were to die, which I most likely will, then I'm a failure, I'm weak, I'm not a good fighter” (Bodd et al. 2023: 87). No person with cancer, or any disease for that matter, should be made to feel this way. Every war has its casualties.

Another way to express this objection is that the revisionist strategy, by seeking to reduce overtreatment, risks its opposite: *undertreatment*. Indeed, undertreatment of cancer remains a concern for certain populations, such as racially

47. See, for discussion, Bodd et al. (2023).

and economically marginalized groups.⁴⁸ However, the way to address undertreatment is *not* by encouraging patients to see themselves as fighters, willing to take on risks of aggressive treatment. Considerable research shows that patients' willingness to accept therapy is rarely the cause of undertreatment (Bouchardy et al. 2007; Lavelle et al. 2014), which is more often driven by other factors such as age, comorbidities, socioeconomic deprivation, and racial disparities (Akinoso-Imran et al. 2022; Obrochta et al. 2021; Fakhri et al. 2021). Therefore, addressing undertreatment requires a bottom-up approach built on generation, dissemination, and communication of evidence on the risks and benefits of cancer treatments in a way relevant to practitioners and patients. This in turn requires improving diversity and inclusion in cancer clinical trials (Aldrighetti et al. 2021), ensuring access to affordable cancer drugs (Cortes et al. 2020), and dismantling structural barriers to healthcare more generally (Islami et al. 2022). To these ends, the fighter effect is far too crude a tool.

5.3 *But it Encourages Overdiagnosis*

The third objection is not against revisionism *per se* but rather its implication, which served as the entry point for this paper, that we should not shy away from saying *a little bit of cancer*. One might worry that the revisionist strategy, which aims to reduce overtreatment of early cancers, comes at a cost of encouraging overdiagnosis. Even if we successfully shift cancer's normative force, at the end of the day, saying "a little bit of cancer" still leads to more cancer patients, and that in itself is a bad thing.

This objection can be addressed by two points of clarification. First, there is the worry of creating more cancer patients. Arguing that we should not shy away from saying "a little bit of cancer" does not entail that we should seek out further opportunities to do so. While the revisionist strategy has unique virtues, nothing in my argument precludes its implementation alongside the restrictive strategy, which I've acknowledged is crucial for reducing overdiagnosis. Revisionist and restrictive approaches should be seen as complementary.

Not shying away from saying "a little bit of cancer" also does not entail that we should call more things cancer than we currently do. Drawing the line between non-cancer and cancer is a challenge. "Cancer" cannot simply be read off of our histological sections or genome analyzers. As we saw in §2.2, medical experts go to great lengths to devise criteria and reach consensus on what to call "cancer." Debates in the philosophy of medicine highlight how drawing the line

48. See, for example, Reeder-Hayes et al. (2016) and Obrochta et al. (2021). For overview and definition of cancer overtreatment, see DuMontier et al. (2020).

between health and disease involves a range of considerations, from frequency and dysfunction to values and norms, depending on one's view of disease.⁴⁹ This paper has not solved this challenge. But it has argued that these considerations should be the same for cancer as they are for other diseases—that we should work to revise cancer's exceptional, unwarranted, and disproportionate normative effects. Norms may still influence what we call disease. But revisionists look to prevent encroachment of particularly pernicious norms pertaining to the cancer diagnosis which motivate calls for relabelling. Revisionists look to a world without the fighter effect, where we can call cancer *cancer* without the worry that it turns cancer *patients* into cancer *fighters*.

Lastly, there is the worry that creating more cancer patients is still a bad thing, even in the absence of the fighter effect. This may be true. (But, to reiterate, revisionism in no way entails this outcome.) However, if the revisionist strategy succeeds, I contend that the harms of overdiagnosis of early cancers would look quite different than they do today. Though it might not make the diagnosis of cancer “good,” at least it could make it a little less bad. It could mean that, when your doctor says, “You have cancer,” it won't be heard as a death sentence, battle cry, or call to arms. It may not be exactly like your doctor diagnosing toenail fungus when you wear sandals to your routine check-up. But perhaps something in between—between the bleak and the banal. If revisionism succeeds, overdiagnosis of early cancer could become at once more mundane and manageable.

6. Conclusion

Should we say *a little bit of cancer*? This paper has argued, against influential voices in the field, that we should not shy away from using the phrase, and, moreover, that shying away misses a key opportunity to address the problem of overtreatment. The revisionist strategy seizes the opportunity to shift the normative force of the cancer diagnosis, specifically the fighter effect, and in so doing offers distinct advantages vis-à-vis alternatives.

While this paper has argued for revisionism as an approach to tackle overtreatment of early cancers, its benefits extend beyond this domain. The fighter effect impacts all patients with cancer. Not coincidentally, the problem of overtreatment is not limited to early-stage cancers but occurs at all stages, perhaps especially in late-stage cancers at the end of life.⁵⁰ As I've argued in this paper,

49. For discussion of drawing the line in the context of cancer see Plutynski (2018: 61–87) and Schwartz (2014). See also, inter alia, Schwartz (2007; 2017) and Rogers & Walker (2017).

50. Studies suggest that overtreatment may affect one-third of patients with cancer near the end of life (Szilcz et al. 2022), with twenty percent receiving aggressive treatments within a month

challenging the fighter effect enables rational, patient-centred decision making in cancer treatment. This applies not only to patients with early cancers but also patients with advanced disease—not just those with *a little bit of cancer* but also those with *a whole lot*.

Challenging the fighter effect is not to minimize the adversity and hardships faced by patients with cancer. Despite dramatic changes in the landscape of cancer therapy over the past decade, treating most cancers is not yet like treating toenail fungus. Treatment for many cancers remains long and hard. Too many cancers remain incurable. Faced with a diagnosis of cancer, many patients may still wish to see themselves as “fighters”; others as “travellers”; others as something entirely different. We should, of course, all be free to attach our own meanings to challenging life experiences. However, as I’ve argued in this paper, these meanings should be decoupled from the illocutionary force of the cancer diagnosis. Only in this way can we achieve Sontag’s sought-after “liberation” and truly tackle the problem of overtreatment.

Acknowledgements

I am especially grateful to Henrik Røed Sherling for the conversations that inspired this paper and for feedback on subsequent drafts. I’m also deeply grateful to Jacob Stegenga, Ina Jäntgen, and Stephen John for their detailed feedback on earlier drafts. Thanks also to Florence Adams and Oliver Holdsworth for insightful discussion, Pablo Hubacher Haerle for helpful correspondence, and two anonymous reviewers at *Ergo* for their careful and constructive feedback on the paper.

References

- Ahlstrom-Vij, Kristoffer (2013). *Epistemic Paternalism*. Palgrave Macmillan.
- Album, Dag, Lars E. F. Johannessen, and Erik B. Rasmussen (2017). Stability and Change in Disease Prestige: A Comparative Analysis of Three Surveys Spanning a Quarter of a Century. *Social Science & Medicine*, 180, 45–51.
- Aldrighetti, Christopher M., Andrzej Niemierko, Eliezer M. Van Allen, Henning Willers, and Sophia C. Kamran (2021). Racial and Ethnic Disparities among Participants in Precision Oncology Clinical Studies. *Journal of Clinical Oncology*, 39(15), 3014.
- Alaggio, Rita, Catalina Amador, Ioannis Anagnostopoulos, Ayoma D. Attygalle, Iguaracyra Barreto de Oliveira Araujo, Emilio Berti, ... Wenbin Xiao (2022). The 5th

of death (Ho et al. 2011, Rochigneux et al. 2017). This is despite guidelines recommending against this practice due to lack of evidence for improved survival or quality of life (Schnipper et al. 2012).

- Edition of the World Health Organization Classification of Haematolymphoid Tumours: Lymphoid Neoplasms. *Leukemia*, 36(7): 1720–1748.
- Alvarado, Michael, Elissa Ozanne, and Laura Esserman (2012). Overdiagnosis and Over-treatment of Breast Cancer. *American Society of Clinical Oncology Educational Book*, 32(1), e40–45.
- Arber, Daniel A., Attilio Orazi, Robert Hasserjian, Jürgen Thiele, Michael J. Borowitz, Michelle M. Le Beau, ... James W. Vardiman (2016). The 2016 Revision to the World Health Organization Classification of Myeloid Neoplasms and Acute Leukemia. *Blood*, 127(20), 2391–2405.
- Arber, D. A., Attilio Orazi, Robert P. Hasserjian, Michael J. Borowitz, Katherine R. Calvo, Hans-Michael Kvasnicka, ... Ayalew Tefferi (2022). International Consensus Classification of Myeloid Neoplasms and Acute Leukemias: Integrating Morphologic, Clinical, and Genomic Data. *Blood*, 140(11), 1200–1228.
- Aster, Jon C (2023). What is in a Name? Consequences of the Classification Schism in Hematopathology. *Journal of Clinical Oncology*, 41(8), 1523–1526.
- Auffenberg, Gregory B., Brian R. Lane, Susan Linsell, Michael L. Cher, and David C. Miller (2017). Practice- Vs Physician-Level Variation in Use of Active Surveillance for Men with Low-Risk Prostate Cancer: Implications for Collaborative Quality Improvement. *JAMA Surgery*, 152(10), 978–980.
- Austin, J. L. (1962). *How to Do Things with Words*. Oxford University Press.
- Berlin, Alejandro, Matthew Ramotar, Anna T. Santiago, Zhihui Liu, Joyce Li, ... Scott E. Eggener (2023). The Influence of the ‘Cancer’ Label on Perceptions and Management Decisions for Low-Grade Prostate Cancer. *Journal of the National Cancer Institute*, 115(11), 1364–1373.
- Bicchieri, Cristina (2005). *The Grammar of Society: The Nature and Dynamics of Social Norms*. Cambridge University Press
- Bicchieri, Cristina (2017). *Norms in the Wild: How to Diagnose, Measure, and Change Social Norms*. Oxford University Press.
- Black, William C., David A. Haggstrom, and H. Gilbert Welch (2002). All-Cause Mortality in Randomized Trials of Cancer Screening. *Journal of the National Cancer Institute*, 94(3), 167–173.
- Bodd, Monica H., Nikki C. Daniels, Hermioni L. Amonoo, Tyler Tate, Kris W. Herring, and Thomas W. LeBlanc (2023). More than Conquerors’: A Qualitative Analysis of War Metaphors for Patients with Cancer. *Supportive Care in Cancer*, 31(1), 87.
- Briggs, Bill (2016, November 10). “Good Cancer?” Views Vary on a Sunny Phrase. *Fred Hutchinson Cancer Center News*. Retrieved from <https://www.fredhutch.org/en/news/center-news/2016/11/good-cancer-views-vary-on-sunny-phrase.html>
- Brooks, Joanna Veazey, Shellie D. Ellis, Emily Morrow, Kim S. Kimminau, and J. Brantley Thrasher. 2018. Patient Factors That Influence How Physicians Discuss Active Surveillance With Low-Risk Prostate Cancer Patients: A Qualitative Study. *American Journal of Men’s Health*, 12(5), 1719–1727.
- Brown, Sarah (2019). Debating When to Call Cancer by Its Name. *Canadian Medical Association Journal*, 191(17), E483–484.
- Burke, Harry B. (2022). Gleason 6 Prostate Cancer: That Which Cannot be Named. *Frontiers in Oncology*, 12, 1073580.
- Carter, Stacy M., Chris Degeling, Jenny Doust, and Alexandra Barratt (2016). A Definition and Ethical Evaluation of Overdiagnosis. *Journal of Medical Ethics*, 42(11), 705–714.

- Cifu, Adam (2024, February 15). I Am Afraid of Early Cancer Detection. *Sensible Medicine*. Retrieved from <https://www.sensible-med.com/p/i-am-afraid-of-early-cancer-detection>
- Chapple, A., S. Ziebland, A. Herxheimer, A. Mcpherson, S. Shepperd, and R. Miller. 2002. Is “Watchful Waiting” a Real Choice for Men with Prostate Cancer? A Qualitative Study. *BJU International*, 90(3), 257–264.
- Charles, Cathy, Cristina Redko, Tim Whelan, Amiram Gafni, Leonard Reyno (1998). Doing Nothing Is No Choice: Lay Constructions of Treatment Decision-Making Among Women with Early-Stage Breast Cancer. *Sociology of Health & Illness*, 20(1), 71–95.
- Cooperberg, Matthew R., William Meeks, Raymond Fang, Franklin D. Gaylis, William J. Catalona, and Danil V. Makaro (2023). Time Trends and Variation in the Use of Active Surveillance for Management of Low-Risk Prostate Cancer in the Us. *JAMA Network Open*, 6(3), e231439.
- Cortes, Javier, Jose M. Perez-García, Antonio Llombart-Cussac, Giuseppe Curigliano, Nagi S. El Saghir, Fatima Cardoso, ... Joaquín Arribas (2020). Enhancing Global Access to Cancer Medicines. *CA: A Cancer Journal for Clinicians*, 70(2), 105–124.
- Conrad, Peter (2007). *The Medicalization of Society: On the Transformation of Human Conditions Into Treatable Disorders*. Johns Hopkins University Press.
- Corsini, Christian, Oskar Bergengren, Stephan Carlsson, Hans Garmo, Marie Hjelm-Eriksson, Per Fransson, ... S. V. Carlsson (2024). Patient-Reported Side Effects 1 Year After Radical Prostatectomy or Radiotherapy for Prostate Cancer: A Register-Based Nationwide Study. *European Urology Oncology*, 7(3), 605–613.
- Cournoyea, Michael, and Ashley Graham Kennedy (2014). Causal Explanatory Pluralism and Medically Unexplained Physical Symptoms. *Journal of Evaluation in Clinical Practice*, 20(6), 928–933.
- Delalogue, Suzette, Seema A. Khan, Jelle Wesseling, and Timothy Whelan (2024). Ductal Carcinoma in Situ of the Breast: Finding the Balance Between Overtreatment and Undertreatment. *The Lancet*, 403, 2734–2746.
- Demmen, Jane, Elena Semino, Zsófia Demjén, Veronika Koller, Andrew Hardie, Paul Rayson, and Sheila Payne (2015). A Computer-Assisted Study of the Use of Violence Metaphors for Cancer and End of Life By Patients, Family Carers and Health Professionals. *International Journal of Corpus Linguistics*, 20(2), 205–231.
- Dixon, Peter R., George Tomlinson, Jesse D. Pasternak, Ozgur Mete, Chaim M. Bell, Anna M. Sawka, David P. Goldstein, and David R. Urbach (2019). The Role of Disease Label in Patient Perceptions and Treatment Decisions in the Setting of Low-Risk Malignant Neoplasms. *JAMA Oncology*, 5(6), 817–823.
- Donovan, J. L., F. C. Hamdy, J. A. Lane, M. Mason, C. Metcalfe, E. Walsh, ... D. E. Neal (2016). Patient-Reported Outcomes After Monitoring, Surgery, or Radiotherapy for Prostate Cancer. *The New England Journal of Medicine*, 375(15), 1425–1437.
- Douer, Dan (2004). Acute Promyelocytic Leukemia: A Target for Preemptive Strike? *Blood*, 104(7), 1913–1914.
- DuMontier, Clark, Kah Poh Loh, Paul A. Bain, Rebecca A. Silliman, Tammy Hshieh, Gregory A. Abel, ... William Dale (2020). Defining Undertreatment and Overtreatment in Older Adults With Cancer: A Scoping Literature Review. *Journal of Clinical Oncology*, 38(22), 2558–2570.
- Dunn, Barbara K., Steven Woloshin, Heng Xie, and Barnett S. Kramer (2022). Cancer Overdiagnosis: A Challenge in the Era of Screening. *Journal of the National Cancer Center*, 2(4), 235–242.

- Dunn, Barbara K., Sudhir Srivastava, and Barnett S. Kramer (2013). The Word “Cancer”: How Language Can Corrupt Thought. *BMJ*, 347, f5328.
- Dworkin, Gerald (1982). Is More Choice Better than Less? *Midwest Studies in Philosophy*, 7(1), 47–61.
- Eastham, James A., Gregory B. Auffenberg, Daniel A. Barocas, Roger Chou, Tony Crispino, John W. Davis, ... Stephen A. Boorjian (2022). Clinically Localized Prostate Cancer: AUA/astro Guideline, Part I: Introduction, Risk Assessment, Staging, and Risk-Based Management. *Journal of Urology*, 208(1), 10–18.
- Egger, Scott E., Alejandro Berlin, Andrew J. Vickers, Gladell P. Paner, Howard Wolinsky, and Matthew R. Cooperberg (2022). Low-Grade Prostate Cancer: Time to Stop Calling It Cancer. *Journal of Clinical Oncology*, 40 (27), 3110–3114.
- Elshof, Lotte E., Kostantinos Tryfonidis, Leen Slaets, A. Elise van Leeuwen-Stok, Victoria P. Skinner, Nicolas Dif, ... Jelle Wesseling. 2015. Feasibility of a Prospective, Randomised, Open-Label, International Multicentre, Phase III, Non-Inferiority Trial to Assess the Safety of Active Surveillance for Low Risk Ductal Carcinoma in Situ – The LORD Study. *European Journal of Cancer*, 51(12), 1497–1510.
- Esserman, Laura, and Scott Egger (2023, August 30). Not Everything We Call Cancer Should Be Called Cancer. *The New York Times*. Retrieved from <https://www.nytimes.com/2023/08/30/opinion/cancer-breast-prostate-treatment.html>
- Esserman, Laura J., Ian M. Thompson, Brian Reid, Peter Nelson, David F. Ransohoff, H. Gilbert Welch, ... Sudhir Srivastava (2014). Addressing Overdiagnosis and Overtreatment in Cancer: A Prescription for Change. *The Lancet Oncology*, 15(6), e234–e242.
- Fagerlin, Angela, Brian J. Zikmund-Fisher, and Peter A. Ubel. 2005. Cure Me Even If It Kills Me: Preferences for Invasive Cancer Treatment. *Medical Decision Making*, 25(6), 614–619.
- Fall, Katja, Fang Fang, Lorelei A. Mucci, Weimin Ye, Ove André, Jan-Erik Johansson, ... Unnur Valdimarsdóttir (2009). Immediate Risk for Cardiovascular Events and Suicide Following a Prostate Cancer Diagnosis: Prospective Cohort Study. *PLoS Medicine*, 6(12), e1000197.
- Fang, Fang, Nancy L. Keating, Lorelei A Mucci, Hans-Olov Adami, Meir J. Stampfer, Unnur Valdimarsdóttir, and Katja Fall (2010). Immediate Risk of Suicide and Cardiovascular Death After a Prostate Cancer Diagnosis: Cohort Study in the United States. *Journal of the National Cancer Institute*, 102(5), 307–314.
- Flanigan Jessica (2017). *Pharmaceutical Freedom: Why Patients Have a Right to Self Medicate*. Oxford University Press.
- Francis, Adele, Jeremy Thomas, Lesley Fallowfield, Matthew Wallis, John M. S. Bartlett, Cassandra Brookes, ... Daniel Rea (2015). Addressing Overtreatment of Screen Detected DCIS; the LORIS Trial. *European Journal of Cancer*, 51(16), 2296–2303.
- Friedman, Asia (2023). *Mammography Wars: Analyzing Attention in Cultural and Medical Disputes*. Rutgers University Press.
- Gallina, Andrea, Nazareno Suardi, Francesco Montorsi, Umberto Capitanio, Claudio Jeldres, Fred Saad, ... Pierre I. Karakiewicz (2008). Mortality At 120 Days After Prostatic Biopsy: A Population-Based Study of 22,175 Men. *International Journal of Cancer*, 123(3), 647–652.
- Gennari, A., F. André, C. H. Barrios, J. Cortés, E. de Azambuja, A. DeMichele, ... N. Harbeck (2021). ESMO Clinical Practice Guideline for the Diagnosis, Staging and Treatment of Patients With Metastatic Breast Cancer. *Annals of Oncology*, 32(12), 1475–1495.

- Gigerenzer, Gerd (2014). Breast Cancer Screening Pamphlets Mislead Women. *BMJ*, 348, g2636.
- Goldman, Alvin I. (1991). Epistemic Paternalism: Communication Control in Law and Society. *The Journal of Philosophy*, 88(3), 113–131.
- Groll, Daniel (2014). Medical Paternalism – Part 1. *Philosophy Compass*, 9(3), 186–193.
- Guo, Zhenlang, Shu Gan, Yuan Li, Chiming Gu, Songtao Xiang, Jianfu Zhou, ... S. Wang. 2018. Incidence and Risk Factors of Suicide After a Prostate Cancer Diagnosis: A Meta-Analysis of Observational Studies. *Prostate Cancer and Prostatic Diseases*, 21(4), 499–508.
- Hamdy, F. C., J. L. Donovan, J. A. Lane, C. Metcalfe, M. Davis, E. L. Turner, ... D. E. Neal (2023). Fifteen-Year Outcomes After Monitoring, Surgery, or Radiotherapy for Prostate Cancer. *The New England Journal of Medicine*, 388(17), 1547–1558.
- Hamdy, F. C., J. L. Donovan, J. A. Lane, M. Mason, C. Metcalfe, P. Holding, ... D. E. Neal (2016). 10-Year Outcomes After Monitoring, Surgery, or Radiotherapy for Localized Prostate Cancer. *The New England Journal of Medicine*, 375(15), 1415–1424.
- Hansen, Per Krogh (2018). Illness and Heroics: On Counter-Narrative and Counter-metaphor in the Discourse on Cancer. *Frontiers of Narrative Studies*, 4(s1), s213–s228.
- Harrington, Kristine J (2012). The Use of Metaphor in Discourse About Cancer: A Review of the Literature. *Clinical Journal of Oncology Nursing*, 16(4), 408–412.
- Hauser, David J., and Norbert Schwarz (2015). The War on Prevention. *Personality and Social Psychology Bulletin*, 41(1), 66–77.
- Hauser, David J., and Norbert Schwarz (2020). The War on Prevention II: Battle Metaphors Undermine Cancer Treatment and Prevention and Do Not Increase Vigilance. *Health Communication*, 35(13), 1698–1704.
- Heleno, Bruno, Maria F. Thomsen, David S. Rodrigues, Karsten J. Jørgensen, and John Brodersen (2013). Quantification of Harms in Cancer Screening Trials: Literature Review. *BMJ*, 347, f5334.
- Ho, Janet (2021). Heroes or Criminals: Discursive Representation of Cancer Patients in Health Awareness Advertisements. *Visual Communication*, 20(2), 159–183.
- Ho, Thi H., Lisa Barbera, Refik Saskin, Hong Lu, Bridget A. Neville, and Craig C. Earle (2011). Trends in the Aggressiveness of End-of-life Cancer Care in the Universal Health Care System of Ontario, Canada. *Journal of Clinical Oncology*, 29(12), 1587–1591.
- Hofmann, Bjørn (2016). Medicalization and Overdiagnosis: Different but Alike. *Medicine, Health Care and Philosophy*, 19(2), 253–264.
- Hoffman, Richard M., Sarah L. Mott, Bradley D. McDowell, Sonia T. Anand, and Kenneth G. Nepple. (2022). Trends and Practices for Managing Low-Risk Prostate Cancer: A SEER-Medicare Study. *Prostate Cancer and Prostatic Diseases*, 25(1), 100–108.
- Humphrey, Peter A. (2017). Histopathology of Prostate Cancer. *Cold Spring Harbor Perspectives in Medicine*, 7(10), a030411.
- Humphrey, Peter A., Holger Moch, Antonio L. Cubilla, Thomas M. Ulbright, and Victor E. Reuter (2016). The 2016 Who Classification of Tumours of the Urinary System and Male Genital Organs-Part B: Prostate and Bladder Tumours. *European Urology*, 70(1), 106–119.
- Hwang, E. Shelley, Terry Hyslop, Thomas Lynch, Elizabeth Frank, Donna Pinto, Desiree Basila, ... Ann Partridge (2019). The COMET (Comparison of Operative Versus Monitoring and Endocrine Therapy) Trial: A Phase III Randomised Controlled Clinical Trial for Low-Risk Ductal Carcinoma in Situ (DCIS). *BMJ Open*, 9(3), e026797.

- Islami, Farhad, Carmen E. Guerra, Adair Minihan, K. Robin Yabroff, Stacey A. Fedewa, Kirsten Sloan, ... Ahmedin Jemal (2022). American Cancer Society's Report on the Status of Cancer Disparities in the United States, 2021. *CA: A Cancer Journal for Clinicians*, 72(2), 112–143.
- Jegerlehner, Sabrina, Jean-Luc Bulliard, Drahomir Aujesky, Nicolas Rodondi, Simon Germann, Isabelle Konzelmann, and Arnaud Chiolero (2017). Overdiagnosis and Overtreatment of Thyroid Cancer: A Population-Based Temporal Trend Study. *PLoS One*, 12(6), e0179387.
- Jensen, Catherine B., Megan C. Saucke, David O. Francis, Corrine I. Voils, and Susan C. Pitt (2020). From Overdiagnosis to Overtreatment of Low-Risk Thyroid Cancer: A Thematic Analysis of Attitudes and Beliefs of Endocrinologists, Surgeons, and Patients. *Thyroid*, 30(5), 696–703.
- John, Stephen (2022). Death Sentences: Criminalization, Medicalization, and the Nature of Disease. *Philosophy of Medicine*, 3(1), 1–17.
- Justman, Stewart (2012). Uninformed Consent: Mass Screening for Prostate Cancer. *Bioethics*, 26(3), 143–148.
- Kane, Heather L., Michael T. Halpern, Linda B. Squiers, Katherine A. Treiman, and Lauren A. McCormack (2014). Implementing and Evaluating Shared Decision Making in Oncology Practice. *CA: A Cancer Journal for Clinicians*, 64(6), 377–388.
- Kennedy, Fiona, Diana Harcourt, and Nichola Rumse (2012). The Shifting Nature of Women's Experiences and Perceptions of Ductal Carcinoma in Situ. *Journal of Advanced Nursing*, 68(4), 856–867.
- Kerr, Anne, Choon Key Chekar, Emily Ross, Julia Swallow, and Sarah Cunningham-Burley (2021). *Personalised Cancer Medicine: Future Crafting in the Genomic Era*. Manchester University Press.
- Khoury, Joseph D., Eric Solary, Oussama Abla, Yassmine Akkari, Rita Alaggio, Jane F. Apperley, ... Andreas Hochhaus (2022). The 5th Edition of the World Health Organization Classification of Haematolymphoid Tumours: Myeloid and Histiocytic/dendritic Neoplasms. *Leukemia*, 36(7), 1703–1719.
- Kim, Su Young, Hyun-Soo Kim, and Hong Jun Park (2019). Adverse Events Related to Colonoscopy: Global Trends and Future Challenges. *World Journal of Gastroenterology*, 25(2), 190–204.
- Klotz, Laurence, Danny Vesprini, Perakaa Sethukavalan, Vibhuti Jethava, Liying Zhang, Suneil Jain, Toshihiro Yamamoto, Alexandre Mamedov, and Andrew Loblaw (2015). Long-Term Follow-Up of a Large Active Surveillance Cohort of Patients With Prostate Cancer. *Journal of Clinical Oncology*, 33(3), 272–277.
- Kukla, Quill R. (2022). What Counts as a Disease, and Why Does it Matter? *The Journal of Philosophy of Disability*, 2, 130–156.
- Labbate, Craig V., Gladell P. Paner, and Scott E. Eggener (2022). Should Grade Group 1 (GG1) Be Called Cancer? *World Journal of Urology*, 40(1), 15–19.
- Le, Yen-Chi Le, Stephanie L. McFall, Theresa L. Byrd, Robert J. Volk, Scott B. Cantor, Deborah A. Kuban, and Patricia Dolan Mullen (2016). Is "Active Surveillance" an Acceptable Alternative?: A Qualitative Study of Couples' Decision Making About Early-Stage, Localized Prostate Cancer. *Narrative Inquiry in Bioethics*, 6(1), 51–61.
- Lim, Megan S. (2023). Haematolymphoid Malignancies: It is Not Important Who We Are But Where We Go From Here. *British Journal of Haematology*, 203(3), 349–350.

- Loeb, Stacy, H. Ballentine Carter, Sonja I. Berndt, Winnie Ricker, and Edward M. Schaeffer (2011). Complications After Prostate Biopsy: Data From Seer-Medicare. *Journal of Urology*, 186(5), 1830–1834.
- Loeb, Stacy, Marc A. Bjurlin, Joseph Nicholson, Teuvo L. Tammela, David F. Penson, H. Ballentine Carter, Peter Carroll, and Ruth Etzioni (2014). Overdiagnosis and Overtreatment of Prostate Cancer. *European Urology*, 65(6), 1046–1055.
- London, Alex John, and Jonathan Kimmelman (2018). Clinical Trials in Medical Center Advertising. *JAMA Oncology*, 4(6), 769–770.
- Magaña, Dalia. Praying to Win This Battle: Cancer Metaphors in Latina and Spanish Women’s Narratives. *Health Communication*, 35(5), 649–657.
- Malm, Heidi (2016). Military Metaphors and Their Contribution to the Problems of Overdiagnosis and Overtreatment in the “War” Against Cancer. *The American Journal of Bioethics*, 16(10), 19–21.
- Maung, Hane Htut (2019). The Functions of Diagnoses in Medicine and Psychiatry. In Serife Tekin and Robyn Bluhm (Eds.), *The Bloomsbury Companion to Philosophy of Psychiatry*. Bloomsbury.
- Mehl, Kayla R. (2023). The Medical Model of “Obesity” and the Values behind the Guise of Health. *Synthese*, 201(6), 215.
- Millikan, Ruth Garrett (2005). *Language: A Biological Model*. Oxford University Press.
- Mohyuddin, Ghulam Rehman, and Aaron M. Goodman (2024). Overtreatment of Multiple Myeloma and Its Precursor States: De-Escalation is an Urgent Need in Clinical Practice and Trials. *Nature Reviews Clinical Oncology*, 21(8), 561–562.
- Morris, Van K., Erin B. Kennedy, Nancy N. Baxter, Al B. Benson III, Andrea Cercek, May Cho, ... Cathy Eng (2023). Treatment of Metastatic Colorectal Cancer: ASCO Guideline. *Journal of Clinical Oncology*, 41(3), 678–700.
- Moser, Richard P., Jamie Arndt, Tyler Jimenez, Benmei Liu, and Bradford W. Hesse (2021). Perceptions of Cancer as a Death Sentence: Tracking Trends in Public Perceptions from 2008 to 2017. *Psycho-Oncology*, 30(4), 511–519.
- Mottet, Nicolas, Roderick C. N. van den Bergh, Erik Briers, Thomas Van den Broeck, Marcus G. Cumberbatch, Maria De Santis, ... Philip Cornford (2021). EAU-EANM-ESTRO-ESUR-SIOG Guidelines on Prostate Cancer-2020 Update. Part 1: Screening, Diagnosis, and Local Treatment With Curative Intent. *European Urology*, 79(2), 243–262.
- Mukherjee, Siddhartha (2011). *The Emperor of All Maladies: A Biography of Cancer*. Simon and Schuster.
- Nelson, Anmarie, Mirella Longo, Anthony Byrne, Stephanie Sivell, Simon Noble, Jason Lester, ... Despina Anagnostou (2020). Chemotherapy Decision-Making in Advanced Lung Cancer: A Prospective Qualitative Study. *BMJ Supportive & Palliative Care*, 14, e758–e764.
- Netto, George J., Mahul B. Amin, Daniel M. Berney, Eva M. Compérat, Anthony J. Gill, Arndt Hartmann, ... Holger Moch (2022). The 2022 World Health Organization Classification of Tumors of the Urinary System and Male Genital Organs-Part B: Prostate and Urinary Tract Tumors. *European Urology*, 82(5), 469–482.
- Nickel, Brooke, Alexandra Barratt, Kevin McGeechan, Juan P. Brito, Ray Moynihan, Kirsten Howard, ... Kirsten McCaffery (2018). Effect of a Change in Papillary Thyroid Cancer Terminology on Anxiety Levels and Treatment Preferences: A Randomized Crossover Trial. *JAMA Otolaryngology–Head & Neck Surgery*, 144(10), 867.

- Nickel, Brooke, Alexandra Barratt, Tessa Copp, Ray Moynihan, and Kirsten McCaffery (2017). Words Do Matter: A Systematic Review on How Different Terminology for the Same Condition Influences Management Preferences. *BMJ Open*, 7(7), e014129.
- Nickel, Brooke, Ray Moynihan, Alexandra Barratt, Juan P. Brito, and Kirsten McCaffery (2018). Renaming Low Risk Conditions Labelled as Cancer. *BMJ*, 362, k3322.
- Nickel, Brooke, Caitlin Semsarian, Ray Moynihan, Alexandra Barratt, Susan Jordan, Donald McLeod, Juan P. Brito, and Kirsten McCaffery (2019). Public Perceptions of Changing the Terminology for Low-Risk Thyroid Cancer: A Qualitative Focus Group Study. *BMJ Open*, 9(2), e025820. <https://pubmed.ncbi.nlm.nih.gov/30813118/>
- Obrochta, Chelsea A., James D. Murphy, Ming-Hsiang Tsou, and Caroline A. Thompson (2021). Disentangling Racial, Ethnic, and Socioeconomic Disparities in Treatment for Colorectal Cancer. *Cancer Epidemiology, Biomarkers & Prevention*, 30(8), 1546–1553.
- Omer, Zehra B., E. Shelley Hwang, Laura J. Esserman, Rebecca Howe, and Elissa M. Ozanne (2013). Impact of Ductal Carcinoma In Situ Terminology on Patient Treatment Preferences. *JAMA Internal Medicine*, 173(19), 1830.
- Pattenden, Trent A., Isaac A. Thangasamy, Wee Loon Ong, Dhanika Samaranayake, Andrew Morton, Declan G. Murphy, ... Elizabeth Pritchard (2024). Barriers and Enablers of Active Surveillance for Prostate Cancer: A Qualitative Study of Clinicians. *BJU International*, 133(Suppl 3), 48–56.
- Plutynski, Anya (2017). Safe or Sorry? Cancer Screening and Inductive. In Kevin C. Elliott and Ted Richards (Eds.), *Exploring Inductive Risk: Case Studies of Values in Science* (149–170). Oxford University Press.
- Plutynski, Anya (2018). *Explaining Cancer: Finding Order in Disorder*. Oxford University Press.
- Pompe, Raisa S., Zhe Tian, Felix Preisser, Pierre Tennstedt, Burkhar Beyer, Uew Michl, ... Derya Tilki (2017). Short- and Long-Term Functional Outcomes and Quality of Life After Radical Prostatectomy: Patient-Reported Outcomes From a Tertiary High-Volume Center. *European Urology Focus*, 3(6), 615–620.
- Powell, Kerrington, and Vinay Prasad. 2023. Interpreting the Results from the First Randomised Controlled Trial of Colonoscopy: Does It Save Lives? *BMJ Evidence-Based Medicine*, 28(5), 306–308.
- Prasad, Vinay, Jeanne Lenzer, and David H. Newman (2016). Why Cancer Screening Has Never Been Shown to “Save Lives” —and What We Can Do About It. *BMJ*, 352, h6080.
- Rajkumar, S. Vincent, Meletios A. Dimopoulos, Antonio Palumbo, Joan Blade, Giampaolo Merlini, María-Victoria Mateos, ... Jesus F. San Miguel (2014). International Myeloma Working Group Updated Criteria for the Diagnosis of Multiple Myeloma. *The Lancet Oncology*, 15, e538–e548.
- Ramsey, Scott, David K. Blough, Anne C. Kirchhoff, Catherine R. Fedorenko, Kyle S. Snell, Polly Newcomb, ... Karen Overstreet (2013). Washington State Cancer Patients Found to be At Greater Risk for Bankruptcy Than People Without a Cancer Diagnosis. *Health Affairs*, 32(6), 1143–1152.
- Ramsey, Scott D., Aastha Bansal, Catherine R. Fedorenko, David K. Blough, Karen A. Overstreet, Veena Shankaran, and Polly Newcomb (2016). Financial Insolvency as a Risk Factor for Early Mortality Among Patients With Cancer. *Journal of Clinical Oncology*, 34(9), 980–986.
- Rawstron, Andy C., Fiona L. Bennett, Sheila J. M. O’Connor, Marwan Kwok, James A. L. Fenton, Marieth Plummer, ... Peter Hillmen (2008). Monoclonal B-Cell Lymphocyto-

- sis and Chronic Lymphocytic Leukemia. *The New England Journal of Medicine*, 359(6), 575–583.
- Reeder-Hayes, Katherine, Sharon P. Hinton, Ke Meng, Lisa A. Carey, and Stacie B. Dusetzina (2016). Disparities in Use of Human Epidermal Growth Hormone Receptor 2–Targeted Therapy for Early-Stage Breast Cancer. *Journal of Clinical Oncology*, 34(17), 2003–2009.
- Reid, Lynette (2017). Truth or Spin? Disease Definition in Cancer Screening. *The Journal of Medicine and Philosophy*, 42(4), 385–404.
- Rivera-Izquierdo, Mario, Marta Maes-Carballo, José J. Jiménez-Moleón, Virginia Martínez-Ruiz, Jan Blaakaer, Rocío Olmedo-Requena, ... J. S. Jørgensen (2023). Gender Bias in Shared Decision-Making Among Cancer Care Guidelines: A Systematic Review. *Health Expectations*, 26(3), 1019–1038.
- Rochigneux, P., J. L. Raoul, Y. Beaussant, R. Aubry, F. Goldwasser, C. Tournigand, and L. Morin (2017). Use of Chemotherapy Near the End of Life: What Factors Matter? *Annals of Oncology*, 28(4), 809–817.
- Rogers, Wendy A., and Mary J. Walker (2017). The Line-Drawing Problem in Disease Definition. *The Journal of Medicine and Philosophy*, 42(4), 405–423.
- Rose, Geoffrey (1985). Sick Individuals and Sick Populations. *International Journal of Epidemiology*, 14, 32–38.
- Ross, Jack, Ramai Santhirapala, Carrie MacEwen, and Angela Coulter (2018). Helping Patients Choose Wisely. *BMJ*, 361, 1–2.
- Ryser, Marc D., Donald L. Weaver, Fengmin Zhao, Mathias Worni, Lars J. Grimm, Roman Gulati, ... E. Shelley Hwang (2019). Cancer Outcomes in DCIS Patients Without Locoregional Treatment. *Journal of the National Cancer Institute*, 111(9), 952–960.
- Sanda, Martin G., Jeffrey A. Cadeddu, Erin Kirkby, Ronald C. Chen, Tony Crispino, Joann Fontanarosa, ... J. R. Treadwell (2018). Clinically Localized Prostate Cancer: AUA/ASTRO/SUO Guideline. Part I: Risk Stratification, Shared Decision Making, and Care Options. *Journal of Urology*, 199(3), 683–690.
- Sagara, Yasuaki, Melissa A. Mallory, Stephanie Wong, Faith Aydogan, Stephen DeSantis, William T. Barry, and Mehra Golshan (2015). Survival Benefit of Breast Surgery for Low-Grade Ductal Carcinoma in Situ: A Population-Based Cohort Study. *JAMA Surgery*, 150(8), 739–745.
- Saquib, Nazmus, Juliann Saquib, and John P. Ioannidis (2015). Does Screening for Disease Save Lives in Asymptomatic Adults? Systematic Review of Meta-Analyses and Randomized Trials. *International Journal of Epidemiology*, 44(1), 264–277.
- Salwei, Megan E., Jessica S. Ancker, and Matthew B. Weinger (2023). The Decision Aid is the Easy Part: Workflow Challenges of Shared Decision Making in Cancer Care. *Journal of the National Cancer Institute*, 115(11), 1271–1277.
- Sanatani, Michael, and Fiona Muir (2023). Oncology Residents’ Experiences of Decision-Making in a Clinical Learning Environment: A Phenomenological Study. *Advances in Health Sciences Education*, 28(5), 1371–1390.
- Sbisà, Marina (2009). Uptake and Conventionality in Illocution. *Lodz Papers in Pragmatics*, 5(1), 33–52.
- Schaeffer, Edward, Sandy Srinivas, Emmanuel S. Antonarakis, Andrew J. Armstrong, Justin E. Bekelman, Heather Cheng, and Deborah A. Freedman-Cass (2021). NCCN Guidelines Insights: Prostate Cancer, Version 1.2021. *Journal of the National Comprehensive Cancer Network*, 19(2), 134–143.

- Schnipper, Lowell E., Thomas J. Smith, Derek Raghavan, Douglas W. Blayney, Patricia A. Ganz, Therese M. Mulvey, and Dana S. Wollins (2012). American Society of Clinical Oncology Identifies Five Key Opportunities to Improve Care and Reduce Costs: The Top Five List for Oncology. *Journal of Clinical Oncology*, 30(14), 1715–1724.
- Scholl, Isabelle, Sarah Kobrin, and Glyn Elwyn (2020). “All About the Money?” A Qualitative Interview Study Examining Organizational- and System-Level Characteristics That Promote or Hinder Shared Decision-Making in Cancer Care in the United States. *Implementation Science*, 15(1), 81.
- Schwartz, Peter H. (2007). Defining Dysfunction: Natural Selection, Design, and Drawing a Line. *Philosophy of Science*, 74(3), 364–385.
- Schwartz, Peter H. (2014). Small Tumors as Risk Factors Not Disease. *Philosophy of Science*, 81(5), 986–998.
- Schwartz, Peter H (2017). Progress in Defining Disease: Improved Approaches and Increased Impact. *The Journal of Medicine and Philosophy*, 42(4), 485–502.
- Semino, Elena, Zsófia Demjén, Jane Demmen, Veronika Koller, Sheila Payne, Andrew Hardie, and Paul Rayson (2017). The Online Use of Violence and Journey Metaphors by Patients with Cancer, as Compared with Health Professionals: A Mixed Methods Study. *BMJ Supportive & Palliative Care*, 7(1), 60–66.
- Sholl, Jonathan (2017). The Muddle of Medicalization: Pathologizing or Medicalizing? *Theoretical Medicine and Bioethics*, 38(4), 265–278.
- Sholl, Jonathan and Andreas De Block (2024). The Vices and Virtues of Medical Models of Obesity. *Obesity Reviews*, 25, e13828.
- Sontag, Susan (1978). *Illness As Metaphor*. Farrar, Strauss and Giroux.
- Stegenga, Jacob (2018). *Care & Cure: An Introduction to Philosophy of Medicine*. University of Chicago Press.
- Stegenga, Jacob (2021). Medicalization of Sexual Desire. *European Journal of Analytic Philosophy*, 17(2), 5–34.
- Sunstein, Cass R., and Richard H. Thaler (2006). Preferences, Paternalism, and Liberty. *Royal Institute of Philosophy Supplement*, 59(December), 233–264.
- Swerdlow, Steven H., Elias Campo, Nancy L. Harris, E. S. Jaffe, Stefano A. Pileri, Harald Stein, ... Reiner Siebert. 2017. *WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues*. International Agency for Research on Cancer.
- Szilcz, Máté, Jonas W. Wastesson, Lucas Morin, Amaia Calderón-Larrañaga, Mats Lambe, and Kristina Johnell (2022). Potential Overtreatment in End-of-Life Care in Adults 65 Years or Older Dying from Cancer: Applying Quality Indicators on Nationwide Registries. *Acta Oncologica*, 61(12), 1437–1445.
- Thompson, Ian M., Donna K. Pauler, Phyllis J. Goodman, Catherine M. Tangen, M. Scott Lucia, Howard L. Parnes, ... Charles A. Coltman Jr. (2004) Prevalence of Prostate Cancer among Men with a Prostate-Specific Antigen Level ≤ 4.0 Ng per Milliliter. *The New England Journal of Medicine*, 350(22), 2239–2246.
- Tosoian, Jeffrey J., Mufaddal Mamawala, Jonathan I. Epstein, Patricia Landis, Katarzyna J. Macura, Demetrios N. Simopoulos, H. Balletine Carter, and Michael A. Gorin (2020). Active Surveillance of Grade Group 1 Prostate Cancer: Long-Term Outcomes From a Large Prospective Cohort. *European Urology*, 77(6), 675–682.
- Ullmann, Timothy M., Katherine D. Gray, Jessica Limberg, Dessislava Stefanova, Maureen D. Moore, Jessica Buicko, ... Toni Beninato (2019). Insurance Status is Associated With Extent of Treatment for Patients With Papillary Thyroid Carcinoma. *Thyroid*, 29(12), 1784–1791.

- Wallis, M. G (2018). How Do We Manage Overdiagnosis/Overtreatment in Breast Screening? *Clinical Radiology*, 73(4), 372–380.
- Washington, Samuel L., Chang Wook Jeong, Peter E. Lonergan, Annika Herlemann, Scarlett L. Gomez, Peter R. Carroll, and Matthew R. Cooperberg (2020). Regional Variation in Active Surveillance for Low-Risk Prostate Cancer in the US. *JAMA Network Open*, 3(12), e2031349.
- Welch, H. Gilbert, and Honor J. Passow (2014). Quantifying the Benefits and Harms of Screening Mammography. *JAMA Internal Medicine*, 174(3), 448–454.
- Welch, H. Gilbert and William C. Black (2010). Overdiagnosis in Cancer. *Journal of the National Cancer Institute*, 102(9), 605–613.
- WHO Classification of Tumours Editorial Board (2022). *WHO Classification of Tumours: Urinary and Male Genital Tumours*. International Agency for Research on Cancer.
- Wilt, Timothy J., Michael K. Brawer, Karen M. Jones, Michael J. Barry, William J. Aronson, Steven Fox, ... Thomas Wheeler (2012). Radical Prostatectomy Versus Observation for Localized Prostate Cancer. *The New England Journal of Medicine*, 367(3), 203–213.
- Wilt, Timothy J., Karen M. Jones, Michael J. Barry, Gerald L. Andriole, Daniel Culkin, Thomas Wheeler, ... Michael K. Brawer (2017). Follow-Up of Prostatectomy Versus Observation for Early Prostate Cancer. *The New England Journal of Medicine*, 377(2), 132–142.
- Woloshin, Steven, Lisa M. Schwartz, William C. Black, and Barnett S. Kramer (2012). Cancer Screening Campaigns – Getting Past Uninformative Persuasion. *The New England Journal of Medicine*, 367(18), 1677–1679.
- Velleman, J. David (1992). Against the Right to Die. *The Journal of Philosophy and Medicine*, 17(6), 665–681.
- Xu, Jinping, Anne V. Neale, Rhonda K. Dailey, Susan Eggly, and Kendra L. Schwartz (2012). Patient Perspective on Watchful Waiting/active Surveillance for Localized Prostate Cancer. *Journal of the American Board of Family Medicine*, 25(6), 763–770.
- Zureigat, Hadil, Bridget Adcock, Daniel P. Nurse, Asad Rauf, Heya Batah, Mariah Ondeck, ... Moaath K. Mustafa Ali (2025). Navigating the 2022 International Consensus and World Health Organization Classifications of Hematopathology: A Call for Unified Diagnostic Language. *Archives of Pathology & Laboratory Medicine*, 149(4), 363–367.