# AI-Assisted Suicide: A Game-Changer in Assisted Dying

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## Abstract

The rapid advancements in AI technology have raised critical questions about its impact on end-of-life care. While much of the debate focuses on AI's potential to predict the preferences of incapacitated patients, little attention has been given to its direct application in delivering lethal drugs at a patient's request. This contribution explores this underexamined issue, arguing that AI is a game-changer in assisted dying. The paper is structured in three parts. The first explains how AI can be effectively applied to the assisted dying process. The second establishes terminological clarity, contending that the direct use of AI should not be classified as either assisted dying or euthanasia, but rather as a distinct category: AI-Assisted Suicide (AIAS). To support this claim, I examine the moral and legal responsibility associated with AI in such procedures. The third part evaluates AIAS through the lens of the key arguments regarding the moral superiority of assisted suicide over euthanasia and vice versa, concluding that AIAS appears preferable from both perspectives. Ultimately, I argue that AIAS should not merely be seen as an extension of existing assisted dying methods but, wherever feasible, as a replacement, since it effectively addresses several ongoing ethical and practical concerns in the end-of-life debate. This conclusion is particularly relevant to legislative frameworks and policymaking in end-of-life care.

## Introduction

"Artificial intelligence" (AI) is an umbrella terms referring to the ability of machines to replicate various aspects of human intelligence, including learning, reasoning, problem-solving, and decision-making. The disruptive and ongoing developments in this field are reshaping the bioethical debate, raising new issues or re-opening traditional discussions. In this context, addressing the ethical questions arising from AI in end-of-life care is crucial.

So far, the ethics of AI and end-of-life issues have developed in different directions. The most common one focuses on the possible application of AI to predict the preferences of incapacitated patients who have not appointed a healthcare proxy and have not written advance directives (1–5).

Another area of inquiry concerns AI tools in assisted dying. In this respects, some applications has been proposed: AI could help verify eligibility based on a country's legal criteria, collect data to anticipate disease progression near the end of life, and facilitate communication with patients and families (6). Discussing the potential application of AI in the end-of-life management in Netherlands, Kolfschooten (7) argues that AI could also assist in the retrospective review of assisted dying cases—a procedure required by some legislations to detect potential abuses.

Alongside these applications, which Tonkens' terminology (6) classifies as indirect, another possibility has been envisioned: employing AI tools to directly carry out the patient's death instead of the physician or the patient themselves, overseeing the entire process—from assessing eligibility criteria to executing the procedure—with minimal or no human supervision[1]. While this possibility

[1] I do not employ the other label suggested by Tonkens, namely "direct applications," which refers specifically to the use of AI in providing assistance in dying to eligible individuals, since my focus is on a broader category that encompasses both indirect and direct applications.

currently faces technical limitations, its potential feasibility demands thorough ethical evaluation. I argue that the direct application of AI in assisted dying could significantly impact how we conceive end-of-life issues. To date, only a few contributions have explored this issue, primarily focusing on how AI could expand access compared to traditional assisted dying methods and redefine the role of physicians in the process (6,7).

This paper builds upon these initial findings and addresses ethical challenges associated with AI-driven assisted dying. My main claim is that this technology should not be conceived merely as an extension of existing assisted dying methods but, wherever feasible, a *replacement*–as it effectively addresses several ongoing concerns in the end-of-life debate, making it, in some respects, preferable to existing assisted dying methods.

More specifically, the paper is structured in three parts. In the first, I explain how AI can be effectively applied to the assisted dying process. In the second part, I focus on terminological clarity, arguing that the direct use of AI should not be classified as a form of assisted dying or euthanasia but rather as a new form of assisted suicide: AI-Assisted Suicide (AIAS). To support this claim, I examine the moral and legal responsibility associated with AI in this procedure. As will become clearer in what follows, this terminological distinction is highly relevant to the aims of this paper. In the third part, I review the main arguments that defend the moral superiority of assisted suicide over euthanasia and vice versa, arguing that AIAS is preferable since AIAS incorporates the positive aspects favored by both sides while avoiding the criticisms each side directs at the other form. Finally, I offer insights into the potential impact of AIAS as well as limitations of my argument, outlining open questions for future research.

## Part 1. AI Performing Assisted Dying: technical aspects

When discussing the direct application of AI in assisted dying, the controversial device "Sarco" is often mentioned. It was first used by a 64-year-old American woman in Switzerland in 2024. Following her death, a criminal investigation was opened on charges of "inciting and abetting suicide" and "strong suspicion of intentional homicide" (8). The device allows patients to autonomously control the dying process, without physician involvement. Sarco is a coffin-sized capsule using nitrogen to induce death in the user who, after pressing the activation button, loses consciousness within a minute and dies from asphyxiation in approximately five minutes (9). The user can also project videos or images—such as idyllic landscapes—during the dying process.

While Sarco currently does not use AI, its design can serve as a model for imagining potential future AI integrations aimed at improving its functionality. In fact, Sarco's creators plan to integrate AI software that would ask the user a series of mandatory questions before activation to verify their identity, mental state, and decision-making capacity (7,10). Provided that certain conditions are met, some argue that this could bypass the need for psychiatric evaluation required for accessing assisted death in several countries like Switzerland. More generally, AI could ensure that access to and use of the device complies with legal requirements of each country, verifying that the person is fully aware and mentally competent to make such a critical decision, if this necessary. In the long run, AI tools could also interact with the patient, monitor and assess their emotional and psychological state, and detect signs of external pressure or psychological vulnerability right before initiating the dying process.

Furthermore, Sarco could integrate software enabling autonomous release of nitrogen upon the patient's verbal request or, if verbal communication is not possible, via eye movements, with no direct physical action. Note that, while voice activation does not necessarily require AI and can be implemented through simpler automation, using AI would still be advisable[2]. An automation system–

[2] By "Automation" I refer to the use of technology or software to perform repetitive tasks that follow fixed patterns over time.

if implemented alone—would not be able to verify the patient's mental state before activation. Automated systems may also struggle with ambiguities in voice interactions with patients. Therefore, an AI-based voice interface would be preferable, as it could engage in meaningful dialogue with the patient, managing complex interactions via natural language processing, dynamic adaptation, and greater personalization.

Here, a clarification is needed. I am aware that AI may not be needed for every task involved in the assisted dying process; for instance, the mere release of nitrogen might not require AI—although the activation could be triggered by AI after the assessments we envisioned above. In this paper, I am not arguing that AI is required for *all the tasks* needed for assisted dying; rather, I am concerned with the general possibility of overseeing the entire assisted dying process—from eligibility assessment to execution —with minimal or no human supervision. In this context, AI represents a way to perform a variety of tasks required for this process *and* to manage other tasks that requires simple automation. Therefore, my references to AI in assisted dying include both specific tasks needing AI in a strict sense and those automated actions that are enabled because of AI assessment.

Notwithstanding, some might reasonably insist that AI integration in the direct execution phase is valuable even if an automation system can do it. AI systems could indeed also monitor the patient's vital signs and other health indicators during the process—such as heart rate, oxygen saturation, and respiratory patterns—ensuring that everything proceeds as planned with no complications (7). AI can collect and interpret this biometric data in real time and respond dynamically, in a way that mere automation systems cannot.

Although the Sarco offers a compelling way to envision a real-world application of AI in performing assisted dying, some authors have proposed alternative forms of AI integration not requiring the patient to be placed inside a capsule. Avoiding the use of this capsule could be beneficial, as Sarco does not allow contact with loved ones until the very end of life, necessitating a certain degree of isolation. These proposals focus more on AI-enabled robotic systems. For instance, van Kolfschooten envisions physicians working alongside AI-assisted robots to administer lethal medication with precise dosage control (7); more speculatively, Tonkens imagines the hypothetical development of fully autonomous robots capable of causing the patient's death (6).

Some AI applications described above are already technologically feasible, others require further development, and some remain speculative. In other words, AI implementation in assisted dying—whether in Sarco-like or robotic scenarios—currently faces technical challenges, particularly regarding safety and reliability. While AI already shows promise in healthcare—for example, in diagnostics, treatment optimization, and even in surgical applications (11,12)—its use requires robust supervision. Still, it is not unrealistic to envision a future scenario in which AI systems achieve enough effectiveness and safety to carry out most of these tasks with minimal or no supervision. Clearly, the degree of required human supervision may vary depending on the technical capabilities these tools will achieve; there may be scenarios in which a physician must be required for prescribing the use of AI performing assisting dying, or others—such as the one envisioned by Sarco's creators—where even the prescription step might be bypassed, since the eligibility assessment would not require a physician.

This paper does not limit itself to a specific subset of the aforementioned AI applications. Rather, it provides preliminary ethical reflections considering the plausibility of a general scenario where an AI system could manage the final steps of the assisted dying process—both assessing the patient's mental state and carrying out the act of death with reliability rivaling a human physician.

## Part 2. Defining AI in Assisted Dying: Clarifying Terminology

## 1. AI-assisted dying: A Too Broad Concept

Once we understand how AI can be directly applied to assisted dying, it becomes crucial to address how to define it, compared to the terminology currently used in the debate. An initial, intuitive answer is "AI-assisted dying"(6).

According to Jones, there are at least two ways to use the term "assisted dying" (13): a generic and a stipulative usage. In generic usage, "assisted dying" refers to an umbrella term covering two main ways a person can be helped to die: (a) voluntary active euthanasia[3], which involves the direct administration of a lethal drug by a physician upon explicit patient request; and (b) physician assisted suicide, where the drug is prescribed by the physician but autonomously ingested by the patient.

The stipulative usage refers instead to more restricted categories of euthanasia and/or physician assisted suicide only when the patient is terminally ill. An example is the Assisted Dying Bill in 2014, where "assisted dying" referred to physician assisted suicide for people expected to die within 6 months. Jones highlights the possible inconsistencies that arise in public debate with the stipulative use, as its meaning may vary depending on country or legislative proposals(13). Therefore, in this paper, I refer to the generic interpretation.

The notion of assisted dying has been employed more frequently in recent years compared to the canonical terms "euthanasia" and "physician assisted suicide", both of which have seen a steady decline in usage (13). There may be multiple reasons for this shift. Some may consider it preferable not to use physician assisting suicide and euthanasia due to historical or negative associations, and because these terms have been used primarily by those against these practices. From this perspective, assisted dying may be seen as a way to soften the moral relevance of euthanasia and assisted suicide (14–16), which may even discredit palliative care as "non-assisted death"(17). I do not take a stance on this perspective, which has been considered controversial (18). Instead, I recognize another possible reason. Many people do not acknowledge a moral difference between physician assisted suicide and euthanasia (19): one of the main lines of thought to argue in favour of the legalization of assisted dying is the consequentialist approach that evaluates actions and omissions in light of the produced consequences. Since, at first glance, physician assisted suicide and voluntary euthanasia lead to the same results – i.e. the death of a patient who requested it –, having an umbrella term that summarizes both can be semantically efficient.

However, I argue that the term "AI-assisted dying" should be rejected. Rehabilitating the distinction between euthanasia and physician assisted suicide is useful for understanding the impact of AI's direct use in the end-of-life context. Employing AI-assisted dying as a label may prevent us from appreciating a significant shift in the end-of-life debate.

## 2. Is the direct use of AI a new form of euthanasia?

A second option to define the direct application of AI it as a new form of euthanasia, as Kolfschooten seems to suggest (7). A possible reason is that the patient does not self-administer the drug, but rather an AI agent that acts in an autonomous and adaptive way does. Notwithstanding, I am sceptical about this possibility. My argument is straightforward: as mentioned, euthanasia entails the direct act of killing a person, generally carried out by a physician or healthcare professional (20). Although "killing" can also refer to a disease (e.g., Disease X killed John), in the sense implied by the canonical definition of euthanasia, "killing" concerns the act of one person killing another. Therefore, euthanasia involves a moral agent – one who can bear responsibility for their actions – and a moral patient. When I refer to moral patient, I am not using it in a moral sense, but in the philosophical one of being the passive subject of a moral's agent action. With the introduction of AI,

[3] I will use euthanasia and voluntary active euthanasia interchangeably. When referring to other forms of euthanasia (e.g., voluntary and non-voluntary), I will specify them properly.

it seems that we are no longer dealing with a moral agent but rather with a machine exhibiting agency. Hence, using AI cannot be considered euthanasia. While in the current euthanasia practice, the physician controls the act of killing, with AI this is no longer the case. Thus, the only moral agent remains the patient. Just as one cannot attribute final responsibility for a person's death to the pill they ingest when committing physician assisted suicide, one cannot attribute moral or legal responsibility to AI.

However, it is easy to note that I have avoided addressing a major issue so far. The argument is incomplete because it rests on a contentious assumption. It must be demonstrated that AI is not a moral agent. Below, I will offer reasons why current AI cannot be deemed morally and legally responsible, though a comprehensive discussion is beyond my scope.

### *2.1. Responsibility of AI in end of life*

Investigating responsibility has historically been central in the end-of-life debate, particularly in discussions on the moral distinction between killing and letting die (21,22). Although it has largely focused on whether the physician *caused* the patient's death, other aspects of the responsibility debate become relevant to our discussion.

As a first step, recall the necessary and sufficient conditions for attributing responsibility to an agent. I use Hart's responsibility taxonomy (23), which applies to both moral and legal responsibility; although there may be differences between the two, they are not relevant in this context. Therefore, my argument can be applicable to both domains. According to Hart, for agent A to be responsible for producing event E — that is, to have outcome responsibility – A must have caused E, which means that they must be causally responsible for E. Moreover, A must also be recognized as an agent occupying a specific role to which certain duties or liberties are ascribed concerning event E; Hart calls it "role responsibility".

This framework is particularly helpful for determining responsibility where blame or compensation must be assessed—for instance, if doctor makes an error prescribing a medication, resulting in the patient's death. Since the doctor's role was to act in the patient's best interests, and they caused a state of affairs that frustrated those interests, responsibility for the outcome can be attributed to them. However, this understanding of responsibility can be applied not only to assign blame but also to recognize praise and commendation when a person has specific duties to perform a task and fulfils them properly. In other words, a moral agent is responsible not only when they commit a blameworthy action, but also when they fulfil their duty or perform a good action. This means that I am not necessarily considering euthanasia as something intrinsically negative here, but rather as an action that requires a moral agent to perform it and take responsibility for it.

Under the two conditions for attributing outcome responsibility, consider the case of AI causing a patient's death. First, we can certainly argue that AI is causally responsible for event E, in the same way that a rainstorm is responsible for flooding a bike path. However, it is controversial whether AI can have role responsibility.

We must further analyse role responsibility, which depends on three capacities the agent must possess: material, epistemic, and moral (24). The first capacity is that of materially causing an action or, generally speaking, a particular state of affairs. One cannot ascribe responsibility for an outcome if the agent is incapable of creating it. I cannot hold someone responsible to avoid punching me in the face if, unfortunately, they do not have arms. Arguably, material capacity is also a necessary condition for causal responsibility. Since AI can materially cause the patient's death, it possesses this capacity.

Regarding epistemic capacity, things are more complex. By epistemic capacity, I refer to the ability to know or foresee the state of affairs likely to result from the agent's action or omission (24). Whether AI possesses epistemic capacity is unclear, as it is unclear whether AI can truly "know". However, following Alvarado, there is at least a sense in which AI can be defined as a tool that does not merely extend perceptual or computational abilities, like a microscope, but directly performs

analysis and inference on epistemic content. Its ability to account for and predict event sequences makes it a paradigmatic example of an epistemic machine (25). Therefore, we can concede that AI has epistemic capacity in some sense.

Regardless of what we believe about the epistemic capacity, it is doubtful that AI possesses moral capacity, which refers to the ability to understand what we ought to do, deliberate morally, make decisions, and control our actions accordingly (23). It is highly questionable whether AI can "understand" and "evaluate" moral actions like humans do. To support this view, I need to further clarify how AI works and why, in Floridi's words, it can be described as *agency without intelligence* (26,27). As said in the introduction, the label "AI" refers to the capability of machines to simulate several aspects of human intelligence, such as learning, reasoning, problem-solving, and decision-making. The recent development of AI, machine learning, and deep learning has expanded the ability of AI tools to perform tasks that previously required human intelligence to be executed. In this sense, a counterfactual definition has often been used in the debate to define what AI is: "that of making a machine behave in ways that would be called intelligent if a human were so behaving" (26). However, this does not mean these results are achieved through the same cognitive processes required for a human being to perform the same tasks. The AI tools under discussion can be categorized as "engineering AI"—that is, systems designed to reproduce the results that human intelligence can achieve rather than replicating the human-like cognitive processes that lead to intelligence production (26). Thus, the direct use of AI in end-of-life circumstances refers to an engineering AI operating through statistical approximations. This means it processes the formal structure of content rather than their meaning—whereas human beings engage in semantic interpretation, a process that neuroscience has only just begun to explore (27). In this sense, AI is "agency without intelligence", representing a fundamental separation between intelligence and agency.

Therefore, there is no sense in which current AI systems possess moral capacity, despite their incredible agency[4]. AI could be causally responsible for an act, but only a human agent can be morally responsible for it. AI is not a moral agent. Note that my use of "moral agent" is narrow, as it requires characteristics such as consciousness and intentionality. However, other authors suggested that AI can also be defined as a moral agent insofar as AI tools incorporate general principles or rules of ethical conduct that are adjusted or interpreted to fit various kinds of situations (28,29) or are considered entities capable of performing morally qualifiable actions, that is, actions that can cause moral good or bad (30). These broader senses of moral agency could even be applied to AI in end-of-life contexts but would not entail responsibility for its actions.

If we have reasons not to attribute responsibility to AI, then we have reasons not to label it euthanasia when AI causes the patient's death.

## 3. AI-Assisted Suicide: A New Category for End-of-Life Care

There is another way to discuss euthanasia in relation to AI. Some might argue I have overlooked other moral actors beyond the patient who could be held responsible for AI's action, such as the algorithm's developers or the hardware manufacturers. Indeed, some authors maintain that when discussing AI and responsibility, we should not think in terms of a gap in responsibility[5], but rather as an abundance of actors sharing portions of it (32,33). This complex cannot be fully addressed here. This paper sets aside the technical problems that could arise in the use of AI in these

[4] This argument holds only if we consider the way AI has been developed so far — and is reasonably expected to develop in the future (26) — that is, in engineering terms. If this were to change, and an AI truly capable of consciousness and intentionality were to emerge, then my argument would need to be reconsidered.

[5] I do not extensively discuss the possibility that AI could create responsibility gaps, as my primary aim in assessing the possibility of AI-euthanasia is to determine whether responsibility can be attributed to an AI agent. The responsibility gap theory holds that no one would be fully responsible for AI's actions since it retains a degree of autonomy (31). Therefore, this theory is compatible with my claim that AI could not perform euthanasia. Moreover, even if no one can be considered fully responsible, we can still acknowledge that the greatest degree of direct responsibility remains with the patient.

circumstances and considers only cases in which AI produces the expected outcome for the person using it. My argument is compatible with attributing responsibility to multiple actors, including programmers, manufacturers, and others, in the event of a malfunction. However, as long as AI performs the assigned task, the only agent ultimately responsible for the act is certainly the person requesting aid in dying[6].

This seems reasonable if we consider how responsibility is assigned in more familiar contexts. Consider, for example, a doctor who administers a drug which ends up harmful due to unforeseen side effects. Multiple moral agents could be considered responsible and even share blame: the scientist who conducted the research, the company that distributed the drug, the regulatory agency that approved it, etc. However, if the medical device functions correctly, final responsibility ultimately falls on whoever prescribes or administers it. Certainly, differences exist between a drug pill and AI tools. Someone might argue that attributing responsibility in the AI context is much more difficult due to the opacity of some AI (black box problem), which calls for AI to be transparent and explainable (34). Notwithstanding, considering what we stated above, I believe that a similar reasoning can be applied to AI when discussing non-malfunction cases.

To sum up, AI does not entail attributing moral agency directly to the machine, nor does it require identifying additional moral agents beyond the person requesting aid in dying. Therefore, AI in end-of-life contexts fits the category of assisted suicide. However, this new form of assisted suicide cannot be equated with physician assisted suicide, the terminology I used above. Some may distinguish between physician assisted suicide and assisted suicide, noting that the prescription of the lethal drug and any assistance during the procedure could be carried out by a different professional—one whose role is not to provide medical care but rather to alleviate suffering in the patient's last phase of life (17).

Some may prefer assisted suicide over physician-assisted suicide because it offers morally relevant advantages(20)[7]. For instance, favoring assisted suicide—by stipulating that assistance with suicide be handled by someone other than ordinary medical practitioners—could prevent practitioners' life-saving disposition from weakening. This may help protect the physician–patient relationship, centered on care rather than causing death. Consequently, it may also safeguard the fundamental goals of medicine and prevents conscientious objection from restricting patient access to this practice. In other words, assisted suicide could be preferable to physician-assisted suicide because it secures patient autonomy without compromising medicine core values. Using AI to carry out the patient's death process may be a step further in this direction, namely toward a de-medicalization of death (6), understood here as its detachment from state medical systems, their institutions, licensed professionals, and moral agents in general. Therefore, we can introduce a new form of assisted suicide: AI-assisted suicide (AIAS). In the next section, I explore the morally relevant implications of this shift, arguing that AIAS is preferable to both euthanasia and physician-assisted suicide/assisted suicide.

## Part 2: Ethical Implications of AI-Assisted Suicide

I propose that AIAS should not be seen merely as an extension of existing assisted dying methods—namely, as just another alternative. Rather, AIAS should be considered a preferable approach to both euthanasia and physician-assisted suicide. The reason is that this new procedure effectively addresses

[6] There is surely a sense in which the programmer or the machine's developer bears responsibility for the outcome produced by that machine, insofar as without their contribution, the patient would not have been able to use it. In this paper, however, I refer to ultimate or final responsibility, that is, the action which—given a background context of non-redundant conditions (e.g., the machine exists, is available, and there is a law permitting its use)—is the necessary and sufficient condition for bringing about a given result.

[7] Crisp extends this argument also to euthanasia.

several of the shortcomings highlighted in the bioethical debate of both canonical forms of assisted dying. To support my claim, it is useful to consider those arguments that, instead of considering euthanasia and assisted suicide morally equivalent, support the superiority of one over the other. I first address the arguments that favour physician-assisted suicide over euthanasia, and then I examine those that claim euthanasia is preferable to physician-assisted suicide. In the following sections, I do not take a specific position on whether one practice is ultimately preferable to the other. Instead, I aim to explore the impact of AIAS on these arguments.

## 1. AIAS when Physician Assisted Suicide is preferred Over Euthanasia

One of the commonly used arguments is that allowing physician assisted suicide—but not euthanasia—more robustly preserves the moral norm of not killing. This norm is regarded as the most fundamental in any social code; it must apply to all people, especially to those who are ill, suffering, and nearing death (35). Avoiding the direct interposition of a moral agent between the patient's decision and the execution of their request, therefore, appears—at least to those who believe that this rule should be upheld without exceptions or with a very limited number of exceptions—less objectionable than euthanasia. This argument can be further strengthened by the view that physician assisted suicide relies on a different justification, one that is easier to endorse compared to the one required for euthanasia. A key distinction that supports this argument is the one between *renouncing life* and *renouncing the right* to life, understood as the right not to be killed (36). In many Western countries, suicide is not illegal, and it is usually assumed that there is nothing *prima facie* morally wrong with suicide itself (18,36). Committing suicide would be an act of renouncing life, which does not necessarily imply renouncing the right to life. If suicide is considered morally acceptable, particularly when the person is suffering from an incurable and untreatable condition, then it is unclear why assisting suicide at least in those circumstances should be *prima facie* morally blameworthy(18). However, making this claim does not necessarily commit us to renouncing the right to life, a right that others have a duty to respect.

Since no moral agent beyond the person requesting is directly involved in the final dying process, AIAS seems to uphold the norm of not killing, at least to the same extent as assisted suicide. Furthermore, considering what I argued in the first part of the paper, namely that this practice might require less involvement of the doctor, the rule of not killing is supported even more effectively. For now, I do not need to further elaborate on this point. For the purposes of my argument, it is sufficient to recognize that the moral norm of not killing, or the right to life, is preserved by the availability of AIAS at least as is preserved by the physician assisted suicide.

Others justify their moral preference for assisted suicide on the basis that it could prevent certain abuses that might otherwise occur with the legalization of voluntary euthanasia. For instance, according to Cohen-Almagor (37), if the ultimate control remained with the patient, unjustifiable cases of involuntary or non-voluntary euthanasia—where a physician causes the patient's death who has either not requested it or is unable to express their will—could be avoided. By allowing only physician-assisted suicide, physicians would not have the possibility of directly performing euthanasia, which might help prevent such abuses (37,38). The possibility of such a slippery slope—where an initial acceptance of voluntary active euthanasia extends to unacceptable cases, such as the one I mentioned—is a highly controversial argument that has fuelled intense debate over the past decades (39–41). Here, I do not intend to argue that the legalization of voluntary euthanasia necessarily leads or has led to similar scenarios. I simply claim that those who morally prefer assisted suicide for this reason would have no grounds to oppose the introduction of AIAS, but only to endorse it. First, like physician assisted suicide, AIAS can prevent the aforementioned potential abuses, since it would require the patient's consent to initiate the procedure. Second, the potential ability in the long run to assess the emotional and psychological states right before the dying process of patients that AI tools may possess, as well as to recognize signs of external pressure or psychological

vulnerability, could provide additional safeguards for individuals who choose to resort to AIAS. In other words, AIAS is not merely a tool that can prevent the previously mentioned abuses (although other potential abuses, which I address in the conclusions, may arise), but also one that can actively prevent against further misconduct.

## 2. AIAS in the Case for Euthanasia Over Physician Assisted Suicide

I have argued that AIAS can be accepted by those who consider assisted suicide morally preferable to euthanasia, but AIAS also proves its superiority over assisted suicide. One of the key arguments put forth by proponents of euthanasia against physician assisted suicide is that the latter is fundamentally discriminatory[8]. According to Schuklenk, prohibiting active euthanasia discriminates against individuals with disabilities preventing them from ending their lives independently (18). For instance, since assisted suicide typically involves ingesting a lethal pill, individuals who are unable to swallow would be excluded from this option (37). In some cases – such as observed in Switzerland – a paraplegic and dysphagic patient is connected to an IV and then activates a plunger with their mouth to inject the lethal drug. However, even in this context, access remains unjustly discriminatory: a patient who is unable to move (e.g., one with locked in syndrome) cannot activate any mechanism.

Moreover, where euthanasia is available, assisted suicide is a rarely chosen option by people who request assisted dying. A paradigmatic case is Canada. In 2023, of 15,343 medically assisted deaths, nearly all were administered by a practitioner, while self-administered assisted deaths cases occurred in fewer than five (43). This data must be handled with care, as it may depend on a range of contextual factors — for instance, the condition in which the patient requested medical aid in dying. Nonetheless, a major explanation for this trend is that physician assisted suicide has a higher failure rate—i.e., more complications and longer times to death—than euthanasia. Schuklenk reports that in some cases, the process has taken up to ten hours, prompting Canadian authorities to require the presence of a physician and a nurse to administer a lethal injection if the patient who opted for assisted suicide does not die within an agreed timeframe (18). In other words, euthanasia may represent a more reliable death.

AIAS could expand access to eligible individuals facing physical impediments in countries where only physician-assisted suicide is permitted or only some protocol for physician-assisted suicide is allowed, such as the lethal drug's oral ingestion. Furthermore, given potential application of AI discussed in Part 1, it is likely that AIAS ensures a safer and more comfortable form of assisted suicide without necessitating euthanasia-based practices. Certainly, the reasons why individuals tend to prefer euthanasia over physician assisted suicide should be examined more thoroughly, both empirically and normatively. However, I see no significant potential differences between the administration of death via euthanasia and via AIAS considering patient's efficacy and comfort. This makes AIAS—at least in this regard—similar to euthanasia, addressing some of the major shortcomings of assisted suicide.

## 3.The superiority of AIAS and practical implications

In light of the aforementioned arguments, AIAS should not just be considered an additional tool for assisted dying but should be regarded as preferable. At first glance, this conclusion may be considered irrelevant to someone who firmly believes there are strong reasons to legalize euthanasia without acknowledging its potential downsides; the same may be true for proponents of assisted

[8] Concerns about discrimination in the end-of-life debate may arise for different reasons beyond the one I suggest in the paper. For example, some legislations could be considered discriminatory insofar as they categorically exclude people with mental illness from access to assisted dying (42).

suicide who are indifferent to the difficulties faced by individuals unable to access these procedures or to the strong preference for euthanasia when both options are available, particularly given its lower rate of complications. However, AIAS's superiority becomes evident if we take a step back and examine both positions in the debate taken together. AIAS incorporates the positive aspects of the practices endorsed by both sides, while avoiding the negative aspects of the form of assisted dying that each side criticizes. From the convergence of arguments supporting either practice, we thus can appreciate the significance of introducing AIAS. Put differently, there appears to be a certain overlapping consensus on the superiority of AIAS, which is less evident within each individual stance in the debate but evident when considering both perspectives together. Recognizing AIAS's advantages can serve as an exercise in moral humility and reasonableness, acknowledging the concerns of the opposing side and striving to accommodate them in the pursuit of broader consensus on assisted dying.

This way to observe on AIAS's superiority is particularly relevant not only for those who, with intellectual honesty, morally prefer one form of assisted dying over the other while still recognizing that their preferred option has shortcomings that should ideally be avoided, but also in the legislative sphere and in shaping political agreement on this highly contentious issue. Making AIAS the primary method for assisted dying could have legal implications in jurisdiction distinguishing euthanasia and assisted suicide. For example, Oregon's Death with Dignity Act allows terminally ill individuals to end their lives through the voluntary self-administration of a lethal dose prescribed by a physician for that purpose. This legislation avoided legalizing euthanasia for reasons similar to those discussed above and some criticized the Act as too restrictive (44). Introducing AIAS would not require new legislation, while still providing the benefits of allowing euthanasia.

Another relevant example is Italy whose penal code distinguishes between consensual homicide (Article 579), which would need to be amended to legalize euthanasia, and assistance in suicide (Article 580). In 2019, while recognizing the inexistence of a right to be killed, the Constitutional Court declared part of the Article 580 unconstitutional, paving the way for physician assisted suicide for patients who meet some specific criteria individuated by the Court. Only recently have various regional governments begun proposing local laws to regulate access to physician assisted suicide. Even here, prompting AIAS could potentially make an amendment to Article 579 unnecessary. Similarly, the recent Terminally Ill Adults (End of Life) Bill – which is likely to be approved in the UK in 2025 – allows only physician assisted suicide for some specific categories of patients. AIAS could be smoothly implemented without further legislative changes for euthanasia.

Certainly, the implementation of AIAS will require approval from regulatory agencies (e.g., EMA or FDA) and a broader regulatory framework might be required. Nevertheless, this can be achieved without the need to modify the existing legal framework that permits physician assisted suicide but not euthanasia, as in Oregon, Italy or UK.

Finally, highlighting AIAS's benefits may also pave the way for new legislation in countries where neither euthanasia nor physician-assisted suicide is currently accessible, given the broader consensus AIAS would likely gain.

## Conclusions and open questions

In this paper, I have analysed the future implementation of AI-based tools to cause death in patients who request it. After exploring the technical aspect of AI direct use in assisted dying, I clarified terminology, arguing that this practice should be understood as a new form of assisted suicide: AI-Assisted Suicide (AIAS). Based on this, I suggested that there are reasons to consider AIAS superior to both physician-assisted suicide and euthanasia, a conclusion that could profoundly impact the end-of-life debate.

If I am correct, over time the introduction of AIAS could lead to a significant reduction in cases of physician-assisted suicide and euthanasia, potentially leading to their near-total dissolution.

Of course, the soundness of what I argued depends on the assumption that AIAS is both accepted by the public and perceived as preferable or at least equivalent to the other forms of assisted dying. Despite I provided some reasons in this direction, some individuals may initially express reluctance toward the adoption of this technology. Skepticism may arise from concerns about potential malfunctions or a general sense of discomfort with this idea. As with all innovations, I acknowledge the introduction of AIAS could face initial resistance. However, I am confident that if technological advancements prove to be genuinely beneficial and effective, society will ultimately embrace it.

In the title of the paper, I described AIAS as a game-changer; however, it is not a panacea. AIAS alone does not resolve all the controversies in end-of-life debate. For example, many questions remain the criteria for access to this practice. This is a fundamental issue in contemporary discussions, which seem increasingly focused on assessing eligibility criteria rather than on the permissibility or impermissibility of euthanasia or assisted suicide (18,45). AIAS, *per se*, does not say anything about these criteria; even if AI were tasked with verifying eligibility, questions remain as to what the criteria should be and through which procedure AI should evaluate them. This issue should be left to legislators, ideally informed by a solid scientific and ethical reflection.

Nevertheless, it may be argued that AIAS'introduction could contribute to the normalization of end-of-life practices and a consequent expansion of access. Those who view assisted dying as an *extrema ratio* may worry about the availability of such a practice (46). Indeed, AIAS de-medicalizes death, allowing assisted dying no longer to be exclusively performed in hospitals. This could potentially expand access to those who are not strictly considered "patients". In this line, one could argue that AIAS will facilitate the legitimization of death requests that are not strictly tied to severe, incurable illnesses, and – in some countries – even untreatable conditions. This could include cases like "weary of life" scenarios, already observed in the Netherlands (47), situations in which a healthy partner seeks to avoid surviving the loss of a long-time partner suffering from ill health (48), or even cases where a healthy elderly patient may request to die because they do not want to be a burden on their family. In other words, according to this argument, AIAS may contribute to weakening the safeguards that protect vulnerable people in the context of assisted dying. Such requests must, of course, be carefully assessed, but other authors argue that they should not be met with absolute concern, nor necessarily seen as an undesirable scenario. Instead, they could represent a way to rethink death in a context where "natural" death has practically disappeared (18).

Other issues I have addressed include obstacles some may face in accessing AIAS. While it undoubtedly offers advantages in terms of accessibility, certain individuals lacking financial resources or necessary assistance may still face obstacles in reaching facilities where AIAS is available. Another concern is whether AIAS might dehumanize the dying process. Here, it should be emphasized that although the final stage of the assisted dying is carried out by AI, it cannot and should not replace a process that begins much earlier, involving both family members and medical professionals. Personally, I doubt that "human" presence is necessary to administer assisted dying in order to humanize the process; compared to the preparatory journey leading up to it. Regardless, dehumanization is an empirical question requiring further investigation.

All these challenges must be addressed before reaching an all-things-considered judgment on integrating AIAS into end-of-life care. However, assessing this possibility is becoming increasingly urgent: if AIAS proves to be as beneficial as it promises, its implementation could prevent significant suffering for many individuals at the end of life.

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