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Context is everything: A realist response to the commentary on epistemic racism in anti-doping research by Ruwuya et al. 2024

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ABSTRACT

This article responds to Ruwuya et al.'s (2024) critique of epistemic racism in anti-doping research, particularly their mischaracterization of our study (Veltmaat et al., 2023). We challenge their claims, emphasising the importance of shared responsibility within the research community to produce culturally relevant, contextually accurate findings, as well as data-close and nuanced interpretations. Contrary to accusations of perpetuating stereotypes about athletes from developing nations, our research in Veltmaat et al. (2023) explores the complex interplay of cultural, social, and economic factors influencing athletes' vulnerability to doping. We stress the need to consider well-documented cultural value differences, such as those between Western and African countries, in shaping anti-doping education and policy. Our findings in Veltmaat et al. (2023) demonstrate that athletes' internalisation of societal values of sport varies, and influenced by a combination of individual and contextual factors. Vulnerability to doping is not confined to any specific race, gender, or location, but arises where values tied to safety, economic stability, or social mobility outweigh rule compliance or the 'spirit of sport'. We advocate for a decolonised approach to anti-doping that embraces cultural diversity and integrates local values into global frameworks. Personal values, not solely the 'spirit of sport,' often serve as protective factors against doping. Our research highlights that values-based anti-doping education may falter when overly reliant on a colonialised narrative of values, particularly in contexts where athletes face diverse pressures. We caution against over-sensitising critiques of epistemic bias, because doing so can hinder constructive dialogue and stifle progress in anti-doping research.

1. Context is everything

Shared epistemic responsibility is critical in ensuring the accuracy, integrity, and reliability of knowledge produced in research. In response to the recent commentary by Ruwuya, Juma, Janarthanan and Woolf (2024), which claims that epistemic racism hinders anti-doping research and uses our work (Veltmaat et al., 2023) as an example, we feel compelled to clarify our position. While we support efforts to address

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Eurocentric biases in anti-doping, we reject the misrepresentation of our research and the broad accusations levelled against it.

The dynamics of shared epistemic responsibility within a project, with multiple authors, voices, ontological and epistemic beliefs can be complex and challenging (Politi, 2024). How we negotiated this through adopting a pragmatic approach and continuous feedbacks and reflections, is described in detail in our article (Veltmaat et al., 2023). However, this collective responsibility extends beyond the scope of the research or research team. We, as epistemic agents, also share responsibly over how knowledge is interpreted, framed, used, and progressed further.

The commentary by Ruwuya, Juma, Janarthanan and Woolf (2024) makes two main arguments: (1) *epistemic racism* hinders anti-doping research, and (2) our article (Veltmaat et al., 2023) can serve as an example of this issue. We choose to respond for two reasons. First, we feel a strong responsibility to our participants to ensure that their voices are represented authentically and as intended, and we reject the implied notion by Ruwuya and colleagues that these should have been censored or challenged by the researchers, reviewers, and editors *within* the study. Second, whilst we support the need for addressing *Eurocentric bias* in anti-doping, we find it concerning that our work was singled out and misinterpreted well beyond its original content to illustrate *epistemic racism*. We also wish to point out that for protecting the anonymity of the athletes who participated in our study, we only reported their nationality and did not include information on race or ethnic origin.

1.1. What our research is and is not about

Contrary to the claims inaccurately made by Ruwuya, Juma, Janarthanan and Woolf (2024), the research was not about "doping by athletes in developing nations" but about *individual-level value priorities* that could mitigate or enhance athletes' vulnerabilities in doping situations. Our research explores the complex, multifaceted nature of athlete vulnerability, shaped by factors like culture, religion, sport type, social and economic environment, access to education (including anti-doping), gender, age, and individual personality, identity, and values—all within the specific context where an athlete must make decisions about doping under unique circumstances. While not all, many of these factors feature in our article and could be selectively framed as epistemic bias to fit a particular agenda.

Ruwuya, Juma, Janarthanan and Woolf (2024) did not *find* evidence of epistemic racism in our article—they *introduced* it through out-of-context generalisations and interpretations far beyond the research evidence we presented. Let us illustrate this point with a hypothetical exercise showing how one pursuing a different agenda could see our article as epistemically ageist, sexist, or ableist. For example, the article suggests that older athletes might feel a sense of urgency in their careers, which could heighten their vulnerability to doping. This could be interpreted as *ageism* if it implies that age-related pressures make older athletes more likely to dope. While the article does not present direct evidence of misogyny, it does note that female triathletes reported anticipated guilt and shame upon testing positive as key protective factors. This suggests that women might face different social pressures and stigmas related to doping, which could warrant further exploration of potential *gender biases*. Similarly, the article does not explicitly address ableism. The focus on elite athletes and the pressures they face might inadvertently overlook the experiences of athletes with disabilities. This could be seen as *ableism* if it implies that only able-bodied athletes are central to the doping discussion, despite having two para-athletes included in the sample. Furthermore, there are references to athletes from less-developed countries, particularly African countries, and their motivations for doping. For example, it is suggested that athletes from these regions might dope to escape poverty, implying a stereotype that athletes from poorer countries are more likely to engage in doping, which could be interpreted as a form of *neo-colonialism*, as it generalizes the behaviour of athletes based on their geographic background. The article also discusses cultural differences in attitudes towards doping, suggesting that values might vary between Western nations and less-developed regions like Africa. This could be interpreted as *stereotypes* and a *racist view* of athletes from these regions although cultural differences in values, as we will discuss later, do exist.

However, in our article, we aimed at exploring or demonstrating none of the group differences outlined above. Our article focused on differences in individual value priorities within the same culture, or even shifts in an individual's values depending on the context and circumstances — and extrapolated these perceived value priorities to the decision about doping athletes may make. The example from Kenya was used to *illustrate* how, in one specific situation, an athlete might justify doping based on their value priorities at that particular moment, and we cautioned readers against generalising our work beyond the empirical results we presented.

In qualitative research, the responsibility of presenting results that are authentic, balanced, and accurate is paramount. In addressing the accuracy of examples in qualitative research, it is essential to critically assess whether the examples presented are not only relevant but also factually sound. This careful vetting process contributes to the trustworthiness of the study, ensuring that readers can rely on the findings. Ultimately, authenticity and trustworthiness in qualitative research foster transparency, build credibility, and contribute to the field's ethical standards, allowing the research to meaningfully contribute to both academic and practical understanding.

Ruwuya, Juma, Janarthanan and Woolf (2024) argue that athletes' examples from Kenya to illustrate how economic pressures and values related to security and stability might influence doping decisions perpetuates harmful stereotypes, accusing us of suggesting that "athletes from developing countries (particularly Africa), are primitive and lack moral capacity", portraying them as "village-dwellers" suggesting they live in a "lawless society" and reinforcing outdated views of Africa as "primitive" or its people as "savages in need of Western intervention". We categorically reject this interpretation. We included quotes about athletes from Africa, specifically Kenya, because the specific perspective on value priorities in such situations may have made this example particularly relevant to our discussion, and illustrated how, for a specific athlete facing economic pressures, personal values might shift and take precedence over anti-doping rules in that moment. It was never meant to generalise or stereotype African athletes *en masse* but to illustrate the complexity of *individual* decision-making under unique circumstances.

1.2. Is there a doping problem in road racing in Kenya?

The pertinent question is why athletes in our discussion reached for an example from Kenya out of the colourful history of doping scandals. Whilst we cannot ascertain the reason for sure, neither can Ruwuya and colleagues, we would like to offer a plausible alternative explanation that is not drawn on racial bias or a (neo-)colonialist view, but on one's lifeworld. Careful reading reveals that examples of 'athletes from Africa' are shared by Athletes 4, 59, and 8 - all of whom are distance runners competing at international level, with Athlete 8 has trained in Kenya. Thus, it could be argued that despite being Westerners, they have good insight into elite distance running as athletes, competing against runners from, as well as training with in, Kenya. It is also a fair assumption that the segment of sport they see and are interested in is athletics, and specifically distance running, which has been tainted with high profile doping cases from Kenya.

In long-distance running, professional athletes primarily earn income through prize money from races and endorsement deals with running shoe manufacturers. In the 1990s, there were more opportunities in track races, but these have declined, while road races and marathons have become more lucrative. As a result, many young East African runners now focus on road races early in their careers, abandoning the traditional path of starting on the track, whilst North American, European, and Australasian runners have largely maintained

the traditional progression (Shelley, Thrower & Petróczi, 2023). Endorsement deals, dominated by Nike and Adidas, vary greatly, with top athletes earning significant sums, while emerging runners often receive only gear.

Kenyan athletes who resort to doping for economic security, both for themselves and their communities, have been discussed indirectly by athletes from the region. For example, an article in The Guardian (Draper, 2024) highlights the story of a Kenyan athlete turned undercover agent for USADA. The piece illustrates how athletes often dope not to achieve global fame but to win lower-profile road races in the U.S., which still offer enough prize money for a good runner to earn a living. This environment, paired with the lack of stringent anti-doping oversight, creates a culture where doping is seen as a necessary step for achieving and maintaining elite status. It also sheds light on how talented athletes from Africa are often exploited for both their talent and circumstances. Interviews with agents in distance running confirm that natural-selection-based talent management models with a larger pool of athletes and little individual attention, which is a potentially lucrative low-risk, high-reward strategy, coupled with the economics of distance running can propel young athletes in the region toward doping (Shelley, Thrower & Petróczi, 2023). This matches the observations presented in a study by Juma, Woolf and Bloodworth (2022) about challenges to implement anti-doping policies in Africa. Their participants spoke of unscrupulous agents and coaches who encourage or even supply young athletes with doping for financial gain.

Further supporting this, a study by Ogama and Sakwa (2019) investigated economic factors influencing doping among distance runners in Iten, Kenya. The study found that economic incentives were significant drivers, with prize money (mean 4.22/5) and sponsorship deals (mean 4.18/5) as the top motivators. Individual financial status (mean 4.06/5) and the relatively low cost of doping substances (mean 3.35/5) were also contributing factors, reflecting the perceived accessibility of performance-enhancing drugs in Africa (Juma, Woolf and Bloodworth, 2022). These findings reinforce the argument that economic pressures indeed play a crucial role in doping decisions for Kenyan athletes, offering insight into why economic stability, rather than cultural stereotypes, was the focus in our example.

We purposefully exclude reasons for unintentional ADRVs from this argument because in our research, we defined doping as "conscious and goal-oriented use of prohibited substances and/or methods" (Veltmaat et al., 2023, p4). Detailed discussion of ADRVs from African countries in contrast to other nations, as well as challenges to implement anti-doping policies and education in Africa, Juma, Woolf and Bloodworth (2022) put forward is informative but irrelevant to the point we made about the environmental factors to elevate risks of (intentional) doping use among the socioeconomically vulnerable athletes.

1.3. Cultural differences in values

Cultural differences in values are well-documented across various societies (e.g., Gelfand et al., 2011, Jackson and Gelfand, 2016, Minkov and Hofstede, 2012, Minkov, 2018, Schwartz, 2006, Schwartz, 2009, Sagiv and Schwartz, 2022). These differences do not imply superiority or inferiority - just diversity. Although the granularity of observed cultural distinctions and their generalization to Africa have been challenged, particularly in Hofstede's dimensions (e.g., Halman and Müller, 2006, Jackson, 2011, van Pinxteren, 2020), the overall sentiment aligns with findings in other research (e.g., Schwartz, 2006) and resonated with the overview of the African values (Idang, 2015).

For instance, take the concept of *fairness*. In Western contexts, fairness typically emphasizes equal treatment for individuals and strict adherence to rules. However, in other cultures, fairness may be viewed through a relational or communal lens, prioritising group harmony over individual benefits. It is because Western cultures, often more individualistic, place greater value on personal achievement and independence, while cultures in Latin America, Africa, and Asia are more collectivist, prioritising family ties, community, and group harmony over individual desires (Minkov and Hofstede, 2012, Minkov, 2018). Schwartz (2006) describes sub-Saharan and North African cultures as being particularly high in embeddedness, where people find meaning in life through social relationships, protecting group solidarity, and maintaining traditional order. This contrasts with the higher levels of affective and intellectual autonomy that characterise many Western, especially English-speaking, countries. While a significant variation within the region on other values (e.g., harmony, mastery, autonomy) exists, embeddedness, egalitarianism, and intellectual autonomy are commonly shared across these societies. Minkov and Kaasa (2022) added further evidence by showing that in Africa, national differences have a stronger effect on cultural variation, while the influence of religion is comparatively minimal (Idang, 2015)

Another relevant example in the context of anti-doping is *rule-following* and *approach to authority*. In many Western cultures, there is a higher tolerance for questioning authority and challenging the status quo, whereas other cultures often emphasize respect for authority and adherence to established traditions and rules (Gelfand et al., 2011, Jackson and Gelfand, 2016). Further to the general observations, empirical studies reveal that value priorities in sport vary across countries, even within developed nations (Mazanov, Huybers and Barkoukis, 2018, Woolway et al., 2021). While there are some shared values, such as the importance of fair play, teamwork, and respect for rules, there are also notable differences. For example, health is a top priority in Greece, while Australians place a higher emphasis on fun and joy. Germans and Russians value discipline and resilience, respectively, while Italians prioritize passion and creativity.

African moral philosophies like Ubuntu, Hunhu, and Umunthu, which emphasize community, shared humanity, and mutual respect, offer culturally relevant frameworks for anti-doping strategies (Makwinja & Ndasauka, 2023, Matinhira & Mbewe, 2023, Mbewe, 2023). Rooted in sub-Saharan cultures, these values promote collective well-being and ethical behaviour, encouraging athletes to avoid performance-enhancing drugs. By integrating these philosophies into anti-doping education, athletes can better grasp the broader impact of their actions on their communities, fostering a long-term, culturally aligned approach to clean sport. However, these values of forgiveness, reconciliation, and second chances clash with global anti-doping rules, which focus on strict liability of individuals and standardised - and punitive - sanctions rather than rehabilitation, except for the case of social drugs. Ubuntu and Umunthu advocate for restorative justice, prioritising community support and personal growth over punishment, while current anti-doping policies leave little room for second chances.

These insights underscore the importance of considering cultural diversity in policy approaches, particularly in anti-doping, where the values and priorities of different societies profoundly shape the understanding and operationalisation of fairness, authority, and rule adherence. Cultural differences also highlight the need for values-based education tailored to different societal (as well as individual) contexts to be both inclusive and effective.

2. Why recognising cultural differences in values is also timely for anti-doping

We agree that decolonizing anti-doping and addressing Eurocentric dominance in research are important issues. Anti-doping operates within a complex global framework influenced by race, culture, colonial history, and developmental disparities. There is substantial evidence that anti-doping practices have been shaped by a Eurocentric, and at times, neo-colonialist perspective. This is exemplified by the 'spirit of sport' values embedded in the World Anti-Doping Code, which stem from Baron Coubertin's Olympic ideals (Beamish and Ritchie, 2015, Ritchie, 2013). Virtues or principles such as fair play, gentlemanly behaviour, modesty in victory, and grace in defeat originated in 19th-century upper middle-class English sports culture (Mallea, 1975)

and remain central to contemporary notions of the 'spirit of sport' (Obasa & Borry, 2019). As part of the decolonisation effort, these values, virtues and principles should be revisited, globally consulted, and tested for their relevance in the 21st century. This effort should also aim to better understand how athletes internalise societal values and virtues of sport (also referred to as the 'spirit of sport') and how value priorities influence individual decision-making. Bridging the gap between societal and organizational values in anti-doping and the values driving individual decisions is long overdue (Petróczi & Boardley, 2022). Burnett (2023) argues that personal values, the integrity of sport and emphasis on fair play and being a clean athlete do not remove the 'moral maze' for athletes in which they must navigate between decisions that can transform their lives but also carry the risk of destroying their futures. In line with the results we presented in Veltmaat et al. (2023), contextual contingencies and personal needs can override earlier value-system or priorities, and thus contribute to risk-taking with supplementation, and potentially with prohibited means if the personal and socio-economic circumstances are conducive to doping – regardless of continents, countries or cultures.

Cultural differences in values and value priorities deserve attention because they significantly impact the global harmonisation of anti-doping education. The ongoing revision of the International Standards, particularly the International Standard for Education (ISE), marks a notable shift toward promoting values through the 'spirit of sport' framework. Draft revisions to the ISE (under consultation at the time of writing[1]) suggest that athletes and Athlete Support Personnel will be expected to advocate for clean sport and align with the 'spirit of sport' as outlined in the Code, namely: Health, Ethics, fair play, and honesty, Excellence in performance, Character and education, Enjoyment and joy in sport, Teamwork, Dedication and commitment, Respect for rules and laws, Respect for self and others, Courage, and Community and solidarity. (Three additional entries: "Athletes' rights as outlined in the Code," "The spirit of sport is expressed in how we play true," and "Doping is fundamentally contrary to the spirit of sport" are neither values or virtues, thus we exclude them from our argument). These Victorian principles may not resonate universally or hold the same meaning and significance across different cultural contexts, especially when it comes to influencing personal decision-making. Applying these 'values' uncritically as part of global anti-doping education risks perpetuating a neo-colonial framework, marginalizing cultural traditions that may offer different perspectives on fairness, competition, and punishment for rule breaking. While global harmonisation of anti-doping rules and procedures is justified for procedural legitimacy (Woolway, Lazuras, Barkoukis and Petróczi, 2020), anti-doping education must remain mindful of diverse societal and personal value systems -precisely this is where our research presented in Veltmaat et al. (2023) fits. Being athlete-centred and athlete-driven, our research makes an important contribution to our understanding of how and to what degree the socially desirable values of sport are adopted, internalised, and operationalised in the context of athlete vulnerability with doping.

In light of the call by Ruwuya, Juma, Janarthanan and Woolf (2024) to address epistemic bias in anti-doping, it is perplexing that they challenge our recommendation to consider cultural as well as individual differences in anti-doping. When they write "we critique the implied notion that developing countries inherently possess systematically different values", they *de facto* defend the assumed universal applicability of Victorian gentlemen's sport values in African and global contexts today, a position that seems contradictory to their earlier work. Two years prior, Ruwuya, Juma and Woolf (2022) themselves argued that the imposition of Western anti-doping policies in Africa can be seen as a form of cultural imperialism and neo-colonialism. They highlighted traditional African sports, such as wrestling, which had their own values and practices, including forms of doping that were culturally accepted and integral to the sport.

By engaging athletes' lived experiences and personal belief systems, our research emphasises the importance of exploring doping through a lens that is both context-specific and inclusive of cultural diversity. This approach contrasts with the uncritical application of the 'spirit of sport' ideals, which do not always resonate with athletes from different cultural, socioeconomic backgrounds, or internalised at the personal level.

3. Our roles, responsibilities, and position as researchers

Ruwuya, Juma, Janarthanan and Woolf (2024) commentary raises two important questions regarding our role and responsibilities as researchers: first, the balance between truthfully representing participants' views, thoughts, and feelings—even if we personally may not agree with them—and second, our shared epistemic responsibility. Our study was specifically designed to capture the dynamic nature of athletes' value priorities and their views on doping. We adopted a relativist and pragmatist approach, focusing on exploring individual perspectives to inform targeted anti-doping initiatives. We stand by the fact that our research adhered to the standards of qualitative inquiry, providing an authentic platform where athletes could freely and openly share their views in a non-judgmental environment. Our responsibility, aligned with good scientific practice, was to present these athletes' opinions as they expressed them, without concealing or challenging their perspectives.

Contrary to what Ruwuya and colleagues suggest, we do not believe it is our role to label or challenge participants' views as 'racist' within the context of a focus group or in our reporting – unless something said is factually incorrect (Millar, 2021). Doing so would undermine the safe, non-judgmental environment necessary for participants to speak honestly. We made it clear in our report that the athletes' perspectives should not be taken as universal truths, but as individual perceptions shaped by their own experiences and contexts. This positioning is not a limitation but rather a deliberate choice to highlight the complexity and subjectivity of athletes' views, ensuring that their voices are represented openly and without bias.

We are aware that our research is not without potential biases on grounds of sample composition, inclusion, our ontological and epistemological position as researchers. We reflected on these possibilities and extensively elaborated on them in our limitation section, but we take this opportunity to reflect on aspects that we have experienced and seen frequently in anti-doping research. Ruwuya, Juma, Janarthanan and Woolf (2024) commentary criticises our work on the sample composition, which included 60 athletes, with only two from developing countries. They argue that this *selection bias* skews the findings towards perspectives prevalent in more economically stable regions, potentially overlooking the experiences and values of athletes from less-developed countries. Whilst we agree with the impact of our sample composition (as we reflected on in our limitation to a great extent), we reject the assertion that this is a result of *our bias selection.* Context not only matters here but it is everything. Recruiting a diverse international sample in a single study is logistically challenging, due to issues like access, cost, and language barriers. Perhaps unbeknownst to Ruwuya and colleagues, we made considerable efforts to expand our sample internationally, reaching out to sport organisations and universities through our personal contacts, including those from Kenya and beyond. The lack of representation from these countries was not due to our lack of effort but their willingness or lack of motivation to take part. Instead of selection bias, we need to talk about *self-selection bias*, and how voices from developing countries can be considered if they do not take part.

Lastly, the commentary raises a critical question of who the true *epistemic agents* are. Are they the athletes participating in the study, the researchers conducting it, or the organizations funding and utilizing the results to shape policies and practices? We adopt a realist stance, advocating that knowledge generation is an incremental process, and no

[1] See: https://www.wada-ama.org/sites/default/files/2024–08/redline%20-%202021%20ise%20v.%202027%20ise_0.pdf, accessed on 12/11/2024.

single piece of research has claim for the 'truth'. Even the most comprehensive and balanced study can only represent a small part of a much larger picture. In line with our pragmatist approach, we argue that knowledge evolves through a continuous process of experimentation, reflection, and adaptation. Our understanding of real-world issues improves incrementally as we gather more data, refine theories, explore issues from diverse angles, and reassess assumptions that may become limiting, irrelevant, or incorrect over time. This view supports the notion that knowledge progresses through gradual advancements and cumulative evidence, implying that epistemic biases should be addressed at the broader 'subject field' level (i.e., anti-doping) through our shared epistemic responsibility.

4. Better balancing epistemic Eurocentrism in anti-doping research

In response to Ruwuya, Juma, Janarthanan and Woolf (2024), we further argue that addressing *Eurocentric* bias (not the questionable concept of '*epistemic racism*') in anti-doping requires more than increasing research from developing countries. Athletes and stakeholders from all regions hold valuable local knowledge and lived experiences that are crucial for understanding anti-doping in their contexts. However, research must avoid merely replicating Eurocentric perspectives in local context. We contend that marginalised groups should have agency in creating local knowledge, not only as participants but as active contributors and co-creators (Kaur, Grama, Chaudhuri and Recalde-Vela, 2023). Still, this work should not occur in isolation.

In our own project, though only partially successful, we aimed to bring together participants from both developed and developing countries to share, exchange, and challenge dominant narratives through storytelling and counter-storytelling (Vadeboncoeur, Bopp and Singer, 2020). This approach can elevate marginalised communities' experiences, promote dialogue, and enrich understanding. Furthermore, collaboration between researchers from both developed and developing countries is crucial. Such collaboration fosters co-creation of knowledge that reflects global realities, ensuring research is inclusive, balanced, and equitable, where no single region or perspective dominates the conversation.

5. Conclusion

The vulnerability factors we outlined are not confined to any specific location, race, gender, or ability. Instead, they characterize situations where values tied to safety, economic stability, or social mobility may take precedence over rule-compliance or the 'spirit of sport.' Personal values, not the 'spirit of sport,' often act as protective factors against doping. Our findings highlight that societal values in sport are not always fully internalised by athletes, especially in certain contexts, challenging the effectiveness of values-based anti-doping education if it clings to the heavily colonialised 'spirit of sport.' We welcome future academic challenges to our work (Veltmaat et al., 2023), but they must be grounded in a deep understanding of the psychological and contextual factors that shape athletes' values, priorities, and experiences. We encourage readers to explore our complementary studies (Woolway et al., 2021, Petróczi et al., 2024) for additional insights from the same research project.

Our shared epistemic responsibility to ensure the accuracy, integrity, and reliability of knowledge produced is not limited to generating new knowledge but also to how knowledge is interpreted, used, and progressed further. Over-sensitising or broadly labelling every critique as *epistemic bias* risks stifling meaningful research, obstructing critical inquiry, and ultimately standing in the way of real change.

CRediT authorship contribution statement

Andrea Petróczi: Conceptualization, Writing – original draft. **Dennis Dreiskämper:** Conceptualization, Writing – review & editing. **Vassilis Barkoukis:** Conceptualization, Writing – review & editing. **Dmitri Bondarev:** Conceptualization, Writing – review & editing. **Sebastian Brueckner:** Conceptualization, Writing – review & editing. **Alessandra De Maria:** Writing – review & editing. **Anne-Marie Elbe:** Conceptualization, Writing – review & editing. **Andrew Heyes:** Conceptualization, Writing – review & editing. **Lambros Lazuras:** Conceptualization, Writing – review & editing. **Annalena Veltmaat:** Conceptualization, Writing – review & editing. **Arnaldo Zelli:** Conceptualization, Writing – review & editing.

Declaration of competing interest

There are no conflicts of interests

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