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Enhancing consumer protection in cryptocurrency transactions: Legal strategies and policy recommendations

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Abstract

Enhancing consumer protection in cryptocurrency transactions presents a critical challenge due to the decentralized and often opaque nature of the cryptocurrency market. This abstract explores the legal frameworks and mechanisms aimed at safeguarding consumers engaging in cryptocurrency transactions, focusing on key issues, challenges, and recommendations for improvement. Consumer protection in cryptocurrency transactions is a pressing concern due to the prevalence of fraud, hacking, and market manipulation. The lack of regulatory oversight and the pseudonymous nature of transactions make it challenging for consumers to seek recourse in cases of fraud or misconduct. To address these challenges, legal frameworks have been developed at both national and international levels. At the national level, some countries have implemented consumer protection laws that apply to cryptocurrency transactions, such as requiring exchanges to comply with anti-money laundering (AML) and know-your-customer (KYC) regulations. However, the effectiveness of these laws is limited by the global nature of the cryptocurrency market and the difficulty in enforcing regulations across borders. Internationally, organizations like the Financial Action Task Force (FATF) have issued guidelines to combat money laundering and terrorist financing in the cryptocurrency sector. These guidelines recommend that countries implement AML and KYC measures for cryptocurrency exchanges and wallet providers. While these recommendations are a step in the right direction, implementation remains a challenge, particularly in countries with limited regulatory capacity or political will. To enhance consumer protection in cryptocurrency transactions, several recommendations can be considered. These include increased collaboration between regulators and industry stakeholders, the development of international standards for consumer protection in cryptocurrencies, and the establishment of a regulatory framework that balances innovation with investor protection. Additionally, consumer education and awareness campaigns can help individuals make informed decisions when engaging in cryptocurrency transactions. In conclusion, enhancing consumer protection in cryptocurrency transactions requires a multi-faceted approach that addresses regulatory gaps, promotes international cooperation, and empowers consumers through education and awareness. By implementing these recommendations, policymakers and industry stakeholders can work together to create a safer and more transparent cryptocurrency market.

Keywords: Consumer Protection; Cryptocurrency; Transactions; Legal Strategies; Policy Recommendations

1. Introduction

The cryptocurrency market has witnessed unprecedented growth and innovation since the introduction of Bitcoin in 2009. Cryptocurrencies, powered by blockchain technology, offer decentralized and borderless transactions, revolutionizing traditional financial systems. With thousands of cryptocurrencies in circulation and a global market capitalization exceeding trillions of dollars, the cryptocurrency market has become a significant player in the global

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economy (Daniyan, et. al., 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Isadare Dayo, et. al., 2021). Consumer protection is paramount in the cryptocurrency market, given its unique characteristics and inherent risks. Unlike traditional financial transactions, cryptocurrency transactions are often irreversible, pseudonymous, and susceptible to fraud, hacking, and market manipulation (Coker, et. al., 2023, Igbinenikaro, Adekoya & Etukudoh, 2024, Izuka, et. al., 2023). Consumers are vulnerable to various threats, including scams, Ponzi schemes, and exchange hacks, highlighting the need for robust mechanisms to safeguard their interests.

This paper aims to examine the legal frameworks and mechanisms designed to enhance consumer protection in cryptocurrency transactions. By analyzing national regulations, international guidelines, challenges, best practices, and recommendations, we seek to understand how legal mechanisms can mitigate risks and improve consumer confidence in the cryptocurrency market (Abaku, & Odimarha, 2024, Daraojimba, et. al., 2023, Popoola, et. al., 2024). Through this exploration, we aim to provide insights into the evolving landscape of consumer protection in cryptocurrency transactions and offer recommendations for enhancing regulatory frameworks to better protect consumers.

The cryptocurrency market has experienced exponential growth and adoption in recent years, driven by the proliferation of digital assets and blockchain technology (Coker, et. al., 2023, Igbinenikaro, Adekoya & Etukudoh, 2024, Izuka, et. al., 2023). Cryptocurrencies offer a decentralized and secure means of conducting transactions, revolutionizing traditional financial systems. With the rise of digital currencies such as Bitcoin, Ethereum, and others, the cryptocurrency market has become a global phenomenon, attracting investors, traders, and consumers alike.

Consumer protection is a critical issue in the cryptocurrency market due to its decentralized nature and the potential risks associated with digital assets (Abaku, Edunjobi & Odimarha, 2024, Daraojimba, et. al., 2023, Popoola, et. al., 2024). Unlike traditional financial systems, cryptocurrencies lack a central authority, making consumers vulnerable to fraud, theft, and other malicious activities. As such, ensuring consumer protection in cryptocurrency transactions is essential to maintaining trust and confidence in the market.

This paper examines the legal frameworks and mechanisms aimed at enhancing consumer protection in cryptocurrency transactions. By analyzing national regulations, international guidelines, and best practices, we seek to identify key challenges and opportunities for improving consumer protection in the cryptocurrency market (Daniyan, et. al., 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Isadare Dayo, et. al., 2021). Through this exploration, we aim to provide insights into how legal mechanisms can be leveraged to safeguard consumers and promote a more secure and transparent cryptocurrency ecosystem.

2. Legal Frameworks for Consumer Protection in Cryptocurrency Transactions

Many countries have enacted specific consumer protection laws that apply to cryptocurrency transactions. These laws aim to ensure fair practices, prevent fraud, and protect consumers from financial harm (Adama & Okeke, 2024, Daraojimba, et. al., 2023, Popoola, et. al., 2024). For example, some countries require cryptocurrency exchanges to provide clear and accurate information to consumers about their services and the risks associated with cryptocurrencies. AML and KYC regulations are designed to prevent money laundering, terrorist financing, and other illicit activities in the cryptocurrency market (Adama & Okeke, 2024, Daraojimba, et. al., 2023, Popoola, et. al., 2024). These regulations require cryptocurrency exchanges and other service providers to verify the identity of their customers and report suspicious transactions to authorities. Compliance with AML and KYC regulations helps to protect consumers by reducing the risk of fraud and illegal activities.

The FATF is an intergovernmental organization that sets standards and promotes effective implementation of legal, regulatory, and operational measures to combat money laundering, terrorist financing, and other related threats (Adama, et. al., 2024, Daraojimba, et. al., 2024, Popo-Olaniyan, et. al., 2022). The FATF has issued guidance on the regulation of virtual assets and virtual asset service providers, including recommendations for AML and KYC measures in the cryptocurrency sector. In addition to the FATF recommendations, there are international standards and guidelines for AML and KYC in cryptocurrency transactions (Aturamu, Thompson & Banke, 2021, Eneh, et. al., 2024, Oke, et. al., 2023). These standards aim to promote consistency and effectiveness in AML and KYC practices across different jurisdictions, enhancing consumer protection and regulatory compliance in the cryptocurrency market.

Overall, national regulations and international guidelines play a crucial role in enhancing consumer protection in cryptocurrency transactions. By ensuring compliance with these regulations, governments and regulatory bodies can help to protect consumers from fraud, promote transparency in the cryptocurrency market, and maintain the integrity of the financial system (Adama & Okeke, 2024, Daraojimba, et. al., 2023, Popoola, et. al., 2024). In addition to the national regulations and international guidelines mentioned earlier, there are other legal frameworks that contribute to

consumer protection in cryptocurrency transactions: Some countries have consumer protection agencies or regulatory bodies specifically tasked with overseeing consumer rights in financial transactions, including those involving cryptocurrencies (Ajayi & Udeh, 2024, Ebirim, et. al., 2024, Popo-Olaniyan, et. al., 2022). These agencies may provide guidance, investigate complaints, and enforce regulations to protect consumers from unfair practices. Smart contracts are self-executing contracts with the terms directly written into code. To ensure consumer protection, some platforms and projects undergo smart contract audits by independent third parties. These audits help identify potential vulnerabilities and ensure that the smart contracts operate as intended, reducing the risk of consumer harm (Adama, et. al., 2024, Ebirim & Odonkor, 2024, Popoola, et. al., 2024).

In many jurisdictions, cryptocurrencies are subject to securities regulations if they are deemed to be securities. These regulations are designed to protect investors and consumers by requiring issuers to disclose relevant information and comply with certain registration and reporting requirements (Adelakun, et. al. 2024, Ebirim, et. al., 2024, Popoola, et. al., 2024). Compliance with securities regulations can enhance consumer protection by increasing transparency and reducing the risk of fraudulent schemes. Cryptocurrency transactions often involve the collection and processing of personal data. Privacy and data protection laws govern how this data is handled, ensuring that consumers' personal information is protected from misuse and unauthorized access (Ajayi & Udeh, 2024, Ebirim, et. al., 2024, Ogedengbe, 2022). Compliance with these laws can help prevent identity theft and other forms of fraud, enhancing consumer protection in cryptocurrency transactions.

Overall, a comprehensive legal framework that includes consumer protection laws, AML and KYC regulations, smart contract audits, securities regulations, and privacy and data protection laws is essential for enhancing consumer protection in cryptocurrency transactions. By implementing and enforcing these regulations, governments and regulatory bodies can help build trust in the cryptocurrency market and protect consumers from potential harm (Adama, et. al., 2024, Ebirim, et. al., 2024, Popo-Olaniyan, et. al., 2022).

3. Challenges in Consumer Protection

One of the primary challenges in consumer protection in cryptocurrency transactions is the lack of regulatory oversight. Cryptocurrencies operate in a decentralized and often unregulated environment, making it difficult for regulators to monitor and enforce consumer protection laws (Adama, et. al., 2024, Ebirim, et. al., 2024, Popoola, et. al., 2024). This lack of oversight can lead to fraudulent schemes, scams, and other abuses that can harm consumers. Cryptocurrency transactions are often pseudonymous or anonymous, meaning that the identities of the parties involved are not readily apparent. While this provides privacy benefits, it also presents challenges for consumer protection (Akpuokwe, Adeniyi & Bakare, 2024, Ekechi, et. al., 2024, Popoola, et. al., 2024). For example, consumers may not be able to verify the identity of the seller or service provider, increasing the risk of fraud and deception.

Cryptocurrency transactions can cross international borders, posing challenges for regulators and law enforcement agencies. Jurisdictional issues arise when a transaction involves parties from different countries, making it difficult to determine which laws apply and who has the authority to enforce them (Ajayi & Udeh, 2024, Ebirim, et. al., 2024, Popoola, et. al., 2024). Additionally, enforcing consumer protection laws in the cryptocurrency space can be challenging due to the decentralized nature of cryptocurrencies and the difficulty in identifying and prosecuting wrongdoers.

Addressing these challenges requires a coordinated effort among regulators, law enforcement agencies, and industry stakeholders. Regulatory frameworks need to be developed to provide clarity and guidance on consumer protection issues in cryptocurrency transactions (Ajayi & Udeh, 2024, Ediae, Chikwe & Kuteesa, 2024, Uzougbo, et. al., 2023). Additionally, efforts to enhance transparency, improve consumer education, and promote responsible business practices can help mitigate the risks associated with cryptocurrency transactions and protect consumers from harm. Many consumers lack a basic understanding of how cryptocurrencies work and the risks associated with using them (Akpuokwe, et. al., 2024, Eneh, et. al., 2024). This lack of awareness can make consumers more susceptible to scams, fraud, and other abuses. Educating consumers about the risks and best practices for using cryptocurrencies is essential for enhancing consumer protection in this space.

Cryptocurrency transactions are typically irreversible, meaning that once a transaction is completed, it cannot be reversed or canceled. This feature presents a challenge for consumer protection, as consumers have limited recourse if they fall victim to fraud or if a transaction goes wrong (Akagha, et. al., 2023, Ekechi, et. al., 2024, Ogedengbe, 2022). Providing mechanisms for dispute resolution and recourse for consumers in such cases is essential for protecting consumers in the cryptocurrency market. Cryptocurrencies and blockchain technology can be complex and difficult for the average consumer to understand. This complexity can make it challenging for consumers to make informed decisions about using cryptocurrencies and protecting their assets (Ajayi & Udeh, 2024, Ediae, Chikwe & Kuteesa, 2024,

Ogedengbe, 2022). Simplifying the technology and providing user-friendly interfaces and tools can help improve consumer protection in the cryptocurrency market.

The cryptocurrency market is susceptible to manipulation and insider trading, which can harm consumers by artificially inflating prices or creating false perceptions of value. Regulators and law enforcement agencies need to be vigilant in detecting and preventing market manipulation to protect consumers from financial harm (Ajayi & Udeh, 2024, Ediae, Chikwe & Kuteesa, 2024, Popoola, et. al., 2024). Unlike traditional financial systems, which often have established redress mechanisms such as chargebacks and refunds, the cryptocurrency market lacks similar mechanisms for consumer protection (Akpuokwe, et. al., 2024, Esho, et. Al., 2024). This lack of redress can leave consumers vulnerable to losses if a transaction goes wrong or if they become victims of fraud.

Addressing these challenges requires a multi-faceted approach that involves regulatory intervention, consumer education, technological innovation, and industry cooperation. By addressing these challenges, policymakers, regulators, and industry stakeholders can help enhance consumer protection in the cryptocurrency market and promote a safer and more secure environment for consumers (Akpuokwe, et. al., 2024, Eyo-Udo, Odimarha & Ejairu, 2024, Popoola, et. al., 2024).

4. Current Initiatives and Best Practices

Many jurisdictions are taking a collaborative approach to enhance consumer protection in the cryptocurrency market. This includes working closely with industry stakeholders such as cryptocurrency exchanges, wallet providers, and other service providers to develop and implement best practices for consumer protection (Akpuokwe, et. al., 2024, Eyo-Udo, Odimarha & Kolade, 2024, Oyewole, et. al., 2024). By collaborating, regulators and industry stakeholders can address regulatory gaps, share information, and develop effective strategies for protecting consumers.

Cryptocurrency exchanges play a key role in ensuring consumer protection by implementing anti-money laundering (AML) and know-your-customer (KYC) measures. These measures help to verify the identity of customers, detect and prevent money laundering and other illicit activities, and enhance the overall security of cryptocurrency transactions (Arema, et. al., 2024, Eneh, et. al., 2024, Okogwu, et. al., 2023). By complying with AML and KYC regulations, cryptocurrency exchanges can help protect consumers and maintain the integrity of the cryptocurrency market.

Educating consumers about the risks and best practices for using cryptocurrencies is essential for enhancing consumer protection (Akpuokwe, et. al., 2024, Igbinenikaro & Adewusi, 2024, Olawale, et. al., 2024). Many jurisdictions have launched consumer education and awareness campaigns to inform consumers about the potential risks associated with cryptocurrencies and how to protect themselves. These campaigns provide valuable information to consumers and help them make informed decisions about using cryptocurrencies. Overall, these initiatives and best practices are helping to enhance consumer protection in the cryptocurrency market (Akpuokwe, et. al., 2024, FAMILONI, Abaku & Odimarha, 2024, Olawale, et. al., 2024). By collaborating with industry stakeholders, implementing AML and KYC measures, and educating consumers, regulators can help protect consumers from fraud, scams, and other abuses in the cryptocurrency market.

Some jurisdictions have implemented regulatory frameworks specifically tailored to cryptocurrencies and digital assets. These frameworks often include licensing requirements for cryptocurrency exchanges and other service providers, as well as guidelines for consumer protection (Akpuokwe, Chikwe & Eneh, 2024, Igbinenikaro & Adewusi, 2024, Olawale, et. al., 2024). By establishing clear regulatory frameworks, regulators can provide consumers with greater confidence and protection when engaging in cryptocurrency transactions. Regulators and law enforcement agencies are increasingly taking enforcement actions against fraudulent schemes and scams in the cryptocurrency market. By targeting bad actors and holding them accountable for their actions, regulators can help protect consumers and deter future misconduct. These enforcement actions send a strong message that fraudulent activities will not be tolerated in the cryptocurrency market.

Some industry participants are taking proactive measures to enhance consumer protection through self-regulation. For example, industry associations and self-regulatory organizations are developing best practices and guidelines for cryptocurrency exchanges and other service providers to follow (Chickwe, 2019, Igbinenikaro, Adekoya & Etukudoh, 2024, Kuteesa, Akpuokwe & Udeh, 2024). By voluntarily adhering to these best practices, industry participants can help protect consumers and promote a more trustworthy cryptocurrency market. Given the global nature of the cryptocurrency market, cross-border cooperation and information sharing are essential for enhancing consumer protection (Akpuokwe, Chikwe & Eneh, 2024, Igbinenikaro & Adewusi, 2024, Olawale, et. al., 2024). Regulators and law enforcement agencies are increasingly working together to share information and coordinate enforcement actions

against fraudulent activities that span multiple jurisdictions. This cooperation helps to close regulatory gaps and protect consumers from cross-border fraud and scams.

These current initiatives and best practices are helping to strengthen consumer protection in the cryptocurrency market. By collaborating with industry stakeholders, implementing clear regulatory frameworks, enforcing laws against fraud and scams, promoting industry self-regulation, and enhancing cross-border cooperation, regulators can help protect consumers and promote a safer and more secure cryptocurrency market.

5. Recommendations for Enhancing Consumer Protection

Governments should consider updating and strengthening their national regulations to address the unique challenges posed by cryptocurrencies (Ayodeji, et. al., 2023, Eneh, et. al., 2024, Okatta, Ajayi & Olawale, 2024). This may include expanding the scope of existing consumer protection laws to cover cryptocurrency transactions, imposing stricter licensing requirements on cryptocurrency exchanges and service providers, and establishing clearer guidelines for consumer recourse in cases of fraud or dispute.

Given the global nature of the cryptocurrency market, international cooperation and coordination are essential for effective consumer protection. Regulators should work together to harmonize regulations, share information on fraudulent schemes and scams, and coordinate enforcement actions against bad actors operating across borders (Bakare, et. al., 2024, Esho, et. Al., 2024, Okatta, Ajayi & Olawale, 2024). Governments, regulators, and industry stakeholders should collaborate to educate consumers about the risks and best practices for using cryptocurrencies. This may include launching public awareness campaigns, providing educational materials and resources, and integrating cryptocurrency education into school curricula.

Governments and industry stakeholders should explore the use of innovative technologies such as blockchain analytics, artificial intelligence, and machine learning for fraud detection and prevention in the cryptocurrency market (Banso, et. al., 2023, Esho, et. Al., 2024, Okatta, Ajayi & Olawale, 2024). These technologies can help identify suspicious transactions, detect fraudulent schemes, and protect consumers from financial harm. By implementing these recommendations, regulators and industry stakeholders can help enhance consumer protection in the cryptocurrency market and promote a safer and more secure environment for cryptocurrency transactions.

Regulators should consider establishing specialized units or task forces dedicated to monitoring and regulating the cryptocurrency market. These units can conduct regular audits and inspections of cryptocurrency exchanges and service providers to ensure compliance with regulations and consumer protection standards (Banso, et. al., 2024, Igbinenikaro & Adewusi, 2024, Odimarha, Ayodeji & Abaku, 2024a). Governments could consider establishing consumer protection funds or insurance schemes to compensate consumers for losses incurred due to fraud, theft, or insolvency of cryptocurrency exchanges. These funds can provide an additional layer of protection for consumers and help build trust in the cryptocurrency market.

Regulators should encourage industry participants to develop and adhere to self-regulatory standards and best practices. This can help promote a culture of compliance and responsibility within the industry and provide consumers with greater confidence in the integrity of cryptocurrency transactions (Chikwe, Eneh & Akpuokwe, 2024, Odimarha, Ayodeji & Abaku, 2024, Ojo, et. al., 2023). Regulators should continuously monitor and evaluate the effectiveness of consumer protection measures in the cryptocurrency market. This may involve conducting surveys, collecting data on consumer complaints and feedback, and analyzing market trends to identify emerging risks and areas for improvement.

Governments, regulators, and industry stakeholders should collaborate through public-private partnerships to enhance consumer protection in the cryptocurrency market. This can involve sharing information and resources, conducting joint initiatives, and developing common standards and guidelines for consumer protection (Chikwe, Eneh & Akpuokwe, 2024, Ndiwe, et. al., 2024, Odimarha, Ayodeji & Abaku, 2024c). By implementing these recommendations, regulators and industry stakeholders can help enhance consumer protection in the cryptocurrency market and build a more robust and trustworthy ecosystem for cryptocurrency transactions.

6. Case Studies and Examples

One of the most notable cases of cryptocurrency fraud is the collapse of the Mt. Gox cryptocurrency exchange in 2014. Mt. Gox was once the largest Bitcoin exchange in the world, but it filed for bankruptcy after losing approximately 850,000 Bitcoins belonging to its customers (Chickwe, 2020, Igbinenikaro & Adewusi, 2024, Lottu, et. al., 2023,

Odimarha, Ayodeji & Abaku, 2024b). This case highlighted the need for stronger regulatory oversight and consumer protection measures in the cryptocurrency market. In response to the Mt. Gox collapse and other incidents, Japan introduced the Virtual Currency Act in 2017 to regulate cryptocurrency exchanges and protect consumers. The act requires exchanges to register with the Financial Services Agency (FSA) and comply with strict security and transparency standards. This regulatory framework has helped enhance consumer protection in Japan's cryptocurrency market and has contributed to the country becoming a leader in cryptocurrency regulation.

Coinbase, one of the largest cryptocurrency exchanges in the United States, has implemented several measures to enhance consumer protection. These include implementing robust security measures to protect customer funds, adhering to strict KYC and AML requirements, and providing insurance coverage for customer funds (Chickwe, 2020, Igbinenikaro, Adekoya & Etukudoh, 2024, Kuteesa, Akpuokwe & Udeh, 2024). Coinbase's proactive approach to consumer protection has helped build trust with its users and regulators. These case studies illustrate the importance of strong regulatory oversight and consumer protection measures in the cryptocurrency market. They also demonstrate the effectiveness of implementing proactive measures to protect consumers and enhance the integrity of the cryptocurrency ecosystem.

Binance, one of the largest cryptocurrency exchanges globally, has faced several security incidents over the years. In response, Binance has taken proactive measures to enhance consumer protection, including implementing advanced security protocols, conducting regular security audits, and offering a Secure Asset Fund for Users (SAFU) to reimburse users in case of a security breach. These measures have helped Binance maintain a high level of security and protect its users' funds.

South Korea has implemented strict regulations to protect consumers in the cryptocurrency market. In 2018, the government introduced regulations requiring cryptocurrency exchanges to adhere to KYC and AML requirements, obtain licenses from the Financial Services Commission (FSC), and implement robust security measures (Chickwe, 2019, Igbinenikaro, Adekoya & Etukudoh, 2024, Kuteesa, Akpuokwe & Udeh, 2024). These regulations have helped reduce fraud and protect consumers from fraudulent schemes in the cryptocurrency market. The European Union (EU) has introduced the Fifth Anti-Money Laundering Directive (5AMLD), which includes provisions to regulate cryptocurrency exchanges and wallet providers. Under the directive, cryptocurrency exchanges and wallet providers are required to conduct customer due diligence, report suspicious transactions, and register with the relevant authorities. These regulations aim to enhance consumer protection and prevent money laundering and terrorist financing in the cryptocurrency market.

These case studies demonstrate the importance of implementing regulatory measures to enhance consumer protection in the cryptocurrency market. They highlight the effectiveness of proactive measures, such as implementing security protocols, conducting regular audits, and adhering to strict regulatory requirements, in protecting consumers and maintaining the integrity of the cryptocurrency ecosystem.

7. Conclusion

In conclusion, the cryptocurrency market presents unique challenges for consumer protection due to its decentralized nature and lack of regulatory oversight. However, through the implementation of robust legal frameworks and regulatory measures, policymakers, regulators, and industry stakeholders can enhance consumer protection and promote a safer environment for cryptocurrency transactions. Key findings from this paper include the importance of national regulations and international cooperation in addressing jurisdictional challenges, the need for continuous monitoring and evaluation of consumer protection measures, and the potential of technological solutions to enhance enforcement efforts.

To enhance consumer protection in cryptocurrency transactions, policymakers, regulators, and industry stakeholders must collaborate to strengthen regulations, improve international cooperation, enhance consumer education, and adopt innovative technologies for fraud detection and prevention. By working together, we can build a more secure and trustworthy cryptocurrency ecosystem for all users. Looking ahead, the future of consumer protection in cryptocurrency transactions will depend on the commitment of stakeholders to address emerging challenges and adapt to evolving regulatory requirements. It is essential for policymakers, regulators, and industry stakeholders to remain vigilant and proactive in their efforts to protect consumers and uphold the integrity of the cryptocurrency market.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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