




Online private label brands: Individual related factors influence attitude and purchase intention

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ABSTRACT

The digital era is transforming marketing activities and consumer behaviors by shifting conventional transactions into digital channels to achieve business sustainability. Online retailers already highlight new or complementary products or endorse specific brands to recommend alternative brands, including their own private labels, after consumers have decided to purchase products, which can be beneficial by introducing a private brand. Private Label Brands (PLBs), also known as store brands or retailer brands, have shown tremendous success in recent years. Therefore, this study aims to examine the attitude built by consumers towards private label products and to provide an overview of the antecedent variables that influence attitudes toward purchasing private label products. Additionally, it seeks to verify whether online shoppers, having made a product choice, are differentially inclined to switch to a recommended alternative. A total of 271 valid responses were collected. The responses were statistically analyzed using SPSS and PLS. The findings of this study showed that frugality, familiarity with PLB, and trust have a significant impact on attitude. However, consumer innovativeness has neither a significant direct influence on attitude nor an indirect influence on intention. This study contributes to understanding the conditions under which an online retail platform can be beneficial by introducing a private brand.

Contribution/Originality: This study contributes to the existing literature by deepening the understanding of online private label brands. This study uses a new estimation methodology and proposes a new formula to assess consumer intention. This study is one of the very few studies that have investigated digital private labels. The paper contributes the first logical analysis and documents factors influencing attitudes, with the paper's primary contribution finding that individual-related factors significantly shape purchase intention.

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1. INTRODUCTION

The digital era is transforming marketing activities and consumer behaviors, particularly by shifting conventional transactions into digital ones to achieve business sustainability (Pasharibu, Soerijanto, & Jie, 2020). The internet also improves the functions of electronic markets in realizing business intelligence, such as big data analysis to analyze consumers' loyalty, purchasing power, and demand (Fu et al., 2020). The internet's tremendous expansion has accelerated a shift from traditional physical stores to e-commerce and online retail development (Tunsakul, 2020). The advancement of technology has changed consumer behavior to buy online (Doulatabadi & Sheng, 2020). Online shopping forms a significant segment of retailing (Menoe & Barnard, 2020). Online retailers already highlight new or

complementary products or endorse specific brands (Fulgoni, 2018). While online retailers tend to recommend alternative brands, including their own private labels, after consumers decide to purchase and add products to their shopping baskets (Gai & Klesse, 2019).

Private label brands (PLBs), also known as store brands or retailer brands, have shown tremendous success in recent years (Geyskens, Keller, Dekimpe, & De Jong, 2018) and are frequently introduced by online platforms (Huang, Zhang, & Liu, 2023). PLB products have become a promising industry with significant growth potential (Kansra, Kumar, & Ali, 2024). The present study attempts to examine the factors influencing consumers to purchase private labels. Retailers produce and sell their own products according to specific store chains (Ihemezie, Ukwuaba, & Nnaji, 2018). These are impacted by financial crises, changing consumer behavior, rising costs of living, the introduction of new retailers, retailing models, and technologies. Financial pressures from the 2008 financial crisis and the recent rise in living costs have affected consumers' disposable income. These pressures influence consumer behavior regarding grocery purchase decisions, such as switching to PLB products and shopping at discounters to save money (Beacom & Bergin, 2024). The market for private brands, or store brands, has expanded significantly over the past two decades (Cheng, Ma, & Ke, 2020). Online platforms often lead the launch of private brands, and this study aims to investigate how private brands are strategically introduced within online retail platforms (Huang et al., 2023).

This study contributes to uncovering under what conditions an online retail platform can be beneficial by introducing a private brand. Therefore, this study aims to see the attitude built by consumers towards private-label products. It also seeks to provide an overview of the antecedent variables influencing attitudes toward purchasing these private-label products. Instead, it aims to verify whether online shoppers, having made a product choice, are differentially inclined to switch to a recommended alternative. The popularity of virtual retailing platforms among youth is attributed to convenience, time-energy saving tendencies, wide outreach, and a large merchandise assortment at attractive prices (Chakraborty, 2024). Convenience has emerged as the most important motivational factor behind internet shopping decisions of youth in another study (Ladhari, Gonthier, & Lajante, 2019). This study is designed in an exploratory way to better understand the nature of online consumer behavior among young people in Malaysia.

Mokhtar, Yusoff, Asmuni, and Fauzi (2020) discovered that young people prefer to buy online since their knowledge of computer technology is greater than that of older people, who believe that online purchasing requires less effort than physical shopping. Malaysian young adults contribute more than half of Malaysian internet users and frequently use the internet to make online purchases (Namayandeh, 2021). The intention to make online purchases has a positive impact on engaging in online shopping activities (Toska, Zeqiri, Ramadani, & Ribeiro-Navarrete, 2023). Online shopping is often perceived as convenient, especially among young adults, as it enables them to easily find a wide range of items that may not be available at their nearest physical stores. This convenience factor is a significant driving force behind their preference for online shopping. Additionally, research has shown that young people are actively engaged in internet shopping (Abidin, Abdul Rahim, Md Sari, & Anuar, 2025).

Consequently, the purpose of this study was to investigate the potential of online PLBs for young people, a topic that has received little attention in the literature on e-commerce. Four individual factors, such as consumer innovativeness, familiarity with PLBs, frugality, and trust, were examined as antecedents that influence young people's attitudes and purchase intentions toward PLBs. To further enhance the understanding of these linkages, the study also examined the mediating role of attitude between individual characteristics and purchase intention.

2. LITERATURE REVIEW

2.1. Individual Related Factors and Attitude

2.1.1. Consumer Innovativeness and Attitude

Consumer innovativeness can be referred to as the tendency to purchase and use new products more quickly and more often than other people (Li, Wang, Li, & Liao, 2021). Innately innovative individuals are more likely to be risk-takers and able to cope with uncertainties (Thakur, Angriawan, & Summey, 2016). It is the processes through which goods are delivered and demanded that really represent an important novelty (Al Maalouf, Sayegh, Makhoul, & Sarkis, 2025) because consumer behavior changes in a profound way (Sáez, Delgado-Ballester, & Munuera Alemán, 2025). Moreover, the more innovative an individual is, the more quickly they will perceive the advantages of innovations, and these perceptions will foster not only a positive attitude towards innovations (Li et al., 2021) but also affect their intentions to adopt because highly innovative individuals are able to cope with high levels of uncertainty (Flores & Jansson, 2021; Kim, Kim, & Kurata, 2025) and are more willing to try out new forms of consumption (Irimia-Diéguez, Velicia-Martín, & Aguayo-Camacho, 2023). Likewise, Menon (2017) discovered that PLBs in the fashion wear sector in the Indian market are positively impacted by consumer innovativeness. While Kumar and Chandra (2020) found the same positive connection in the context of private labels of virtual retailers. Consumers' innovativeness has a positive effect on attitudes in the growth stage of the life cycle, so it may be expected (Fort-Rioche & Ackermann, 2013) that consumer innovativeness positively influences attitudes towards PLBs. Based on the above analysis, the following hypothesis was proposed.

H₁: Consumer's innovativeness has a positive relationship with attitude toward PLBs.

2.2. Familiarity with PLBs and Attitude

Brand familiarity refers to the total experience a consumer has with a product, encompassing both use experience and product advertising (Alba & Hutchinson, 1987; Khan & Fatma, 2019). Molinillo, Japutra, Nguyen, and Chen (2017) suggest that factors influencing brand familiarity include consumer perspectives on brand values and identity. Therefore, a positive consumer perspective or good familiarity with a brand is likely to enhance consumer understanding

of quality, utility value, durability, and the association or image of a product or service brand. Shah, Awan, Alvi, Tumio, and Ali (2021) indicated that when consumers are familiar with brands, they form a positive attitude and have a higher purchase intention. Consumers who are familiar with a brand will not be easily affected by competitors, unlike those who are unfamiliar with the brand (Loureiro, 2017). Familiarity is also beneficial, as it reduces the effort required for information search related to brands, products, or services (Bapat, 2017). Familiarity allows individuals to have comparatively safe expectations about the future (Mittendorf, 2018). It gives consumers confidence and contributes to a favorable evaluation of goods or services, which then influences purchase intentions (Surjaatmadja & Purnawan, 2018). In addition, consumers process information and shape their attitude towards new brands by relying on various sources; in contrast, their attitudes towards familiar brands have already been established (Huang, 2016). Based on the above analysis, the following hypothesis was proposed.

H₂: Familiarity with PLBs has a positive relationship with attitude towards PLBs.

2.3. Frugality and Attitude

Ladhari et al. (2019) defined frugal behavior as a unidimensional consumer lifestyle trait characterized by the extent to which consumers refrain from using resources as economic products and services to attain long-term goals. Other than that, frugality also refers to consumers' behavioral traits marked by the degree to which consumers tend to adopt restraint in acquiring goods and services and attempt to use them resourcefully (Holmes, Dodds, & Frochot, 2021; Lastovicka, Bettencourt, Hughner, & Kuntze, 1999). Frugal customers limit their expenditures and focus more on long-term advantages. Frugal buyers look to get the most use out of their assets and devise as many acquisition methods as they can. As compared to ordinary customers, frugal shoppers are less affected by personal connections (Wang, Ma, Bai, & Zhang, 2021). People frequently consider the financial aspect as a vital element in a transactional relationship (Ye, Viswanathan, & Hann, 2018). Frugality has often been associated with resource-saving behavior that contributes to sustainable consumption, and studies investigate consumer frugality and its relationship with brand attitude, purchase intention, and purchase behavior (Villavicencio & Schlesinger, 2023). Frugality, brand attitude, and purchasing behavior in green restaurants. Frugality has always been regarded as a good social morality, emphasizing rational planning and enjoyment of life, Awais, Samin, Gulzar, Hwang, and Zubair (2020), and has had many effects on individual psychology and attitudes. Frugality is aimed at individual desires and does not limit people's normal life needs (Zhao & Gao, 2018). However, individual consumption attitudes are still more or less influenced by frugality. As a restraint of self-consumption, frugality has an effect on the consumer attitude of tourists (Nagarajan, Afjal, & Idroes, 2025). Based on the above analysis, the following hypothesis was proposed.

H₃: Frugality has a positive relationship with attitude towards PLBs.

2.4. Trust and Attitude

Trust is a psychological condition characterized by the desire to accept vulnerability based on positive expectations of one's desires or attitudes (Zain & Marsasi, 2023). Consumers who psychologically trust a product or service can indirectly improve the company's reputation when using the products or services they use. Trust will be crucial to increase purchase intentions (Roh, Seok, & Kim, 2022). Companies must understand the relationship between consumer trust and uncertainty to design marketing strategies that aim to build consumer trust, which in turn impacts increased purchase intentions. The greater the consumer's trust in the product, the stronger the consumer's intention to use the product (Marsasi & Barqiah, 2023). Companies can strengthen consumer purchase intentions by building and maintaining trust through quality service, positive experiences, and transparent communication. Maintaining consumer trust and company reliability is an essential step in marketing strategy. The more consumers believe in the reliability of a company, the greater their trust in the service or product provider (Ladwein & Romero, 2021). Trust is the foundation for creating and maintaining relationships between companies and consumers. The higher the level of trust consumers have, the more likely they are to engage in purchasing behaviour. Based on the above analysis, the following hypothesis was proposed.

H₄: Trust has a positive relationship with attitude towards PLBs.

2.5. Purchase Intention

Purchase intention is defined as the subjective propensity of a customer to select a product, which includes the opinions of customers on particular brands and products, as well as outside influences. It reflects the willingness and potential of customers to buy a specific product, representing a form of consumer psychology activity (Jia & Liu, 2018). The customer's buying decision is intricate. A certain buy product or service is known as purchase intention in the final decision of the customers and depends on some external and internal factors (Wang et al., 2023). In fact, purchase intention measures the willingness of consumers to buy and return to buy more (Elmanadily & El-Deeb, 2022). Online purchase intention is studied as the degree to which a consumer is willing to buy a product through an online store (Peña-García, Gil-Saura, Rodríguez-Orejuela, & Siqueira-Junior, 2020). Demonstrated that an increase in purchase intention implies an increase in the chance of purchasing, meaning if consumers have a positive purchase intention, then positive engagement will promote that purchase (Martins, Costa, Oliveira, Gonçalves, & Branco, 2019). Various studies have examined the relationship and influence of antecedent factors on private label purchase intentions (Haro, 2017; Kakkos, Trivellas, & Sdrolias, 2015; Mulatsih & Kusumawardhani, 2020). The consumers' purchase behavior has evolved due to the rise of internet usage, which allows consumers to perform online transactions. The way of online purchase differs from traditional methods because consumers are more concerned about the online store and its various components (Zin et al., 2024).

2.6. Attitude Towards PLBs

Attitude refers to consumers' positive or negative assessment of a purchase based on their perception of the value obtained through the purchase (Dhir, Sadiq, Talwar, Sakashita, & Kaur, 2021). Consumer attitude includes consumers' attitudes towards purchasing behaviors, products, sellers, and other consumption links during cross-border e-commerce. Consumer attitude is a kind of ideology (Dunteman & Lee, 2023). The ideology influences the concrete actions of consumers. Therefore, consumer attitudes affect consumers' consumption ideas, behaviors, and demands (Wang et al., 2023). When the consumer's attitude is more positive, their purchase intention improves. Otherwise, it limits consumers' intention to buy. There is a positive correlation between consumer attitude and purchase intention (Al Maalouf et al., 2025). Consumer attitude is a crucial factor affecting purchase intention. Studies related to private labels tend to focus on the effect of stores as retailers on perceptions and attitudes towards private labels (Graciola, De Toni, Milan, & Eberle, 2020; Manikandan, 2020; Porral & Levy-Mangin, 2016). Attitude towards online shopping plays an important role in designing and implementing an e-commerce strategy (Meppurath & Varghese, 2022). Based on the above analysis, the following hypothesis was proposed.

H₁: Attitude towards PLBs has a positive relationship with purchase intention.

3. RESEARCH METHODOLOGY

A cross-sectional descriptive research design is employed in this study to gain a general understanding of how consumer innovativeness, familiarity with PLB, frugality, and trust influence attitude and purchase intention. A total of 271 young adults participated in this study. This study employs a purposive sampling strategy, a non-probability sampling method. The respondents must fulfill three criteria to participate: first, they must be between 18 and 30 years old; second, they must have heard of or used PLB's products before; and finally, they must have direct and indirect experience with third-party marketplace platforms. Data analysis was conducted using the SPSS program and the Partial Least Squares-Structural Equation Modeling (PLS-SEM) approach. A five-point Likert scale was used, with 1 denoting "strongly disagree" and 5 denoting "strongly agree." The 27 indicators modified for this study's questionnaire explained six different variables: six indicators explained each of the following: consumer innovativeness (Mangafić, Pilav-Velić, Martinović, & Činjurević, 2017), familiarity with PLBs (Porral & Levy-Mangin, 2016), frugality (Goldsmith, Flynn, & Clark, 2014), trust (Dam, 2020), attitude (Cheah, Phau, & Liang, 2015), and purchase intention (Diallo & Siqueira Jr, 2017). Existing scales were used, with slight wording changes where necessary to adapt the questions to the context.

4. RESULTS AND DISCUSSION

Descriptive analysis was conducted to characterize the respondent sample profile. First and foremost, this study consisted of 271 respondents from five regions (Northern, Central, Southern, East Coast, Sabah Sarawak, and the Federal Territory of Labuan) in Malaysia who took part in this study. Regarding the details, the study's participants included 129 male respondents (47.6 percent) and 142 female respondents (52.4 percent), making up the majority of the participants. Thirty-two point five percent of the respondents (88 respondents) have a bachelor's degree. With 92 respondents, the majority are employed in the private sector, accounting for 33.9 percent. Most of them (56.1 percent) were still unmarried (152 respondents). They contributed 56.5 percent and 54.2 percent, respectively, based on their experience with PLB (153 respondents) and third-party (147 respondents) within 1 to 5 years.

4.1. Common Method Variance

The researchers collected data from respondents regarding both exogenous and endogenous constructs simultaneously using a questionnaire. Hence, there is a chance that the common method bias (CMB) issue may occur, potentially disrupting the study data (Kraus, Rehman, & García, 2020). To eliminate the possibility that CMB might have happened, all respondents were assured of complete confidentiality during data collection, and their responses would be used only for research purposes. All respondents were asked to read each item carefully and provide honest responses. Additionally, the pilot study confirmed that the questionnaire was error-free and written in plain language (Kraus et al., 2020). Furthermore, Harman's single-factor test was performed to assess the absence of CMB. A value of total variance higher than 50% reveals that a CMB issue exists, while a value of CMB less than 50% indicates that there is no CMB issue. The test showed that a single factor accounts for 15.75 percent of the total variance. Hence, in this study, CMB can be excluded (Kraus et al., 2020).

4.2. Measurement Model

At the beginning of the measurement model assessment process, three primary assessments are required. Following the recommendations of Hair, Gabriel, and Patel (2014), it incorporates discriminant validity, convergent validity (as demonstrated by indicator reliability, outer loadings, and average variance extracted), and internal consistency reliability. The outer loadings exceeded the cut-off value of 0.707 suggested by Carmines and Zeller (1979). However, since they were in different constructs and were well above the value of 0.4 suggested by Henseler, Ringle, and Sarstedt (2015) as the cut-off for the removal of an indicator, they were left in the model. This can help in extracting useful information about the indicator and generating a better score for the latent variable, as well as for the rest of the measurement indicators that verify the discriminant validity. Moreover, a bootstrapping with 5000 iterations confirmed the statistical validity of the loadings through the *t*-test, with all *p*-values being <0.01.

Regarding internal consistency and convergent validity, the reliability and validity measures were assessed through Cronbach's Alpha, the rho correlation coefficient, composite reliability, and average variance extracted (AVE) for each

construct in the model. The measures exceeded the value of 0.7 suggested by Nunnally and Bernstein (1994) as an acceptable level for reliability. Concerning convergent validity, all constructs surpassed the cut-off of 0.5 suggested by Fornell and Larcker (1981) for the AVE criterion; that is, each construct explained at least 50% of the variance of the assigned indicators (Henseler et al., 2015). The discriminant validity requirement was also fulfilled, as the square root of the variance shared between each construct and its measures (AVE), shown in the values on the main diagonal (in bold), exceeded the correlations between each construct and any other (the rest of the matrix) (Hair et al., 2014). However, given that the Fornell-Larcker criterion may not be sensitive enough to detect possible problems in discriminant validity, the Heterotrait-Monotrait (HTMT) ratio of correlations method was also applied (Henseler et al., 2015).

In this measurement model, all HTMT ratio values are below the 0.90 threshold suggested by Gold, Malhotra, and Segars (2001), considered acceptable when latent variables measure similar constructs, indicating the model is well adjusted (heterotrait correlations are lower than monotrait correlations). Additionally, a full bootstrapping procedure was conducted, as recommended by Hair et al. (2021), to test the null hypothesis $HTMT \geq 1$. The confidence intervals obtained do not contain values equal to or >1 , confirming discriminant validity. Overall, the six constructs of the proposed model were statistically distinct and suitable for estimating the structural model, as the measurement model satisfied criteria for internal consistency, reliability, and convergent and discriminant validity.

4.3. Structural Model

To investigate the standardized path coefficients and confirm the suggested hypotheses, the structural model was estimated after the measurement model had been analyzed and validated. The R^2 values for the endogenous variables in the structural model range between 30% and 40%. R^2 values of 0.67, 0.33, and 0.19 indicate substantial, moderate, and weak models, respectively (Chin, 1998). Therefore, the model's strength in predicting attitude and purchase intention is moderate.

Additionally, Q^2 (predictive relevance) is also reported. A blindfolding procedure was applied to obtain Q^2 values. According to Hair et al. (2021), values greater than zero suggest that the exogenous constructs possess predictive relevance for the endogenous construct in question, which is fulfilled in all cases in the present model. After calculating the R^2 and Q^2 values, the significance of the path coefficient was tested. The results for each hypothesis, according to the corresponding path coefficient, together with the respective p-value obtained through bootstrapping, confirmed the statistical significance of each parameter.

In this study, four direct hypotheses were developed between the constructs. To test the significance level, t-statistics for all paths were generated using SmartPLS 4.0's bootstrapping function. Based on the results, only three relationships were found to have a t-value ≥ 1.645 , thus significant at the 0.05 level. Specifically, familiarity with PLBs ($\beta = 0.409$, $p < 0.01$), frugality ($\beta = 0.334$, $p < 0.01$), and trust ($\beta = 0.168$, $p < 0.01$) were positively related to attitude, which explains 39.2% of the variance in attitude.

Consequently, H1 is not supported, indicating that consumer innovativeness is not related to attitude. Ramkumar and Woo (2018) observed no significant correlation between consumer innovativeness and attitude towards online fashion, which aligns with this finding. The results may suggest that consumers who are highly innovative and demand distinctive products might directly create a purchase intention without having a preexisting positive attitude towards companies, products, and services. As a result, depending on how one person views a brand, product, or service, another person may not see the same thing as new (Karaarslan & Akdoğan, 2015).

Hypothesis 2 indicated that familiarity with PLB significantly impacted attitude, which was supported. This aligns with the results of Rew and Cha (2021). Brazilians accustomed to the visual components used in the advertisement game tend to develop more positive opinions about the brand, suggesting that visual familiarity may influence consumer behavior (Wanick, Stallwood, Ranchhod, & Wills, 2018). The psychological aspects of consumers, including learning, emotions, and purchase intentions, as well as behavioral reactions like sharing messages with friends or making recommendations, are proven to be influenced by brand attributes (Terlutter & Capella, 2013).

Hypothesis 3 stated that frugality significantly influences attitude and was validated. This aligns with Gumulya (2020)'s conclusion that frugal customers are those who must make careful use of their resources to achieve long-term objectives (Lastovicka et al., 1999). This is supported by Lang (2018), who found that thrifty shoppers have positive views and are more aware of the worth and price of products, going to lengths to prevent wasting funds and resources (Evans, 2011).

Hypothesis 4 indicated that trust significantly influences attitude, which was supported. This aligns with Triandewo and Sagy's (2021) findings. Trust is crucial to the online buying experience for consumers, especially regarding privacy and the quality of goods being sold (Rajali & Briliana, 2014). This is consistent with a study by Ramirez, Obenza, and Mabayag (2024) demonstrating how trust affects university student attitudes.

Lastly, hypothesis 5 refers to the relationships between attitude and purchase intention. Since consumer attitude is thought to have a positive and significant correlation with behavior, it is a psychological factor that marketers should be aware of Kusuma, Bagia, Dewanti, and Suarmaja (2021). Attitude has a significant impact on customer behavior when it comes to choosing a product, brand, or service. Because attitude has a positive and significant impact on purchasing decisions, consumers who like or have a positive attitude towards a product are more likely to choose and buy it (Kusuma et al., 2021). This means that the more positively a consumer feels about a product's existence, the more likely they are to make a purchase.

Additionally, it presents the effect size (f^2), which estimates the contribution of each exogenous construct to the R^2 of an endogenous latent variable. The f^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large effects,

respectively (Cohen, 1988). The results show the effect of each variable on attitude is small for consumer innovativeness (0.002), small to medium for trust (0.043), large for frugality (0.173), and familiarity with PLB (0.248).

5. CONCLUSION

Based on the analysis and discussion results, it can be concluded that familiarity with PLBs, frugality, and trust can positively and significantly predict attitude and purchase intention. While not for consumer innovativeness. Companies that want to increase and create consumer purchase intention can pay attention to these factors. Over the past few decades, the digital platform in Malaysia has swiftly changed. Due to their hectic schedules, consumers are increasingly choosing to buy and sell online. The e-commerce platform is expanding at an incredible rate, which has given e-commerce companies many opportunities. Malaysia's internet retail sector is entering a new stage of competition. With a strong brand preference, consumers will have a higher purchase intention for the brand compared to other brands. The implications of this study are expected to help companies determine the right marketing strategy by taking into account several factors that can create and increase consumer buying intentions so that they can compete with foreign and domestic brands.

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Institutional Review Board Statement: The study involved minimal risk and followed ethical guidelines for social science fieldwork. Formal approval from an Institutional Review Board was not required under the policies of [Faculty of Humanities, Management and Science/University Putra Malaysia, Malaysia]. Informed verbal consent was obtained from all participants, and all data were anonymized to protect participant confidentiality.

Transparency: The author states that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

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