

Equality or Differentiation? Pedagogical Accommodation for Students with Special Educational Needs in Inclusive Online Learning

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Abstract

Inclusive education is often associated with treating students equally, yet identical treatment can reproduce barriers when learners require different forms of access and support. This qualitative secondary analysis revisits a case study of inclusive learning at SMA Negeri 2 Bukittinggi during the Covid-19 period. The original dataset had previously generated a publication on teaching strategies for students with special educational needs; the present study asks a distinct question about how teachers negotiated equality and pedagogical differentiation across face-to-face and online settings. The archived corpus includes 15 school informants—two vice principals and 13 teachers across subject areas—together with non-participant observations, repeated in-depth interviews, and documentation. Findings show four patterns. First, equality was expressed through shared membership in regular classes and the use of common digital platforms. Second, ‘the same for everyone’ became problematic when online delivery shifted adaptation burdens onto students. Third, teachers developed accommodations through seating position, repeated explanations, simpler questions, visual and audiovisual media, worksheets, and closer monitoring. Fourth, parents became important learning partners when direct teacher support diminished. The discussion distinguishes procedural equality from pedagogical equity: learning goals and social membership can remain common while representation, interaction, pacing, and assessment require flexible support. The study argues that inclusive education should evaluate access by participation and demonstrated competence rather than by identical treatment.

Keywords: differentiation; inclusive education; pedagogical accommodation; special educational needs; online learning.

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Introduction

Inclusive education is grounded in the principle that students should not be excluded from quality education because their bodies, sensory capacities, communication patterns, or learning needs differ from dominant expectations. In practice, however, inclusion is more complicated than placement. A student can sit in a regular classroom and still experience restricted access to instructions, media, peer interaction, assessment, or teacher feedback. The analytical challenge is therefore to distinguish physical integration from pedagogical participation.

This distinction is closely related to equality and equity. Equality can be understood as common membership, common rights, and access to the same institutional environment. Equity recognizes that equal rights may require differentiated support. In education, the tension becomes visible when teachers ask whether treating a student differently is discriminatory or necessary. Inclusive practice requires a careful answer: expectations

should not be lowered solely because of a disability label, but irrelevant barriers should not prevent students from demonstrating what they know.

The Covid-19 shift to online learning intensified this problem. Teacher support that previously depended on proximity—moving a student nearer the front, noticing confusion, repeating instructions, or providing spontaneous assistance—became harder to deliver through a screen. Students and families had to manage devices, platforms, internet access, and written or audiovisual instructions at home. Pandemic research reported additional challenges for students with special educational needs because teacher assistance and parental support were uneven (Minsih et al., 2021; Arsani et al., 2021; Hasanah & Marlina, 2022).

Indonesian studies of inclusive schooling show that strategy and media adaptation remain central to participation. Angreni and Sari (2022) demonstrate that learning in inclusive primary schools needs to respond to student characteristics, while Marlina et al. (2022) show how differentiated task structures can support social skills. Earlier work emphasized the importance of teacher attitudes and creative strategy in inclusive contexts (Elisa & Wrastari, 2013; Nugroho & Mareza, 2016). These studies support differentiation, yet there remains a practical risk that teachers equate inclusion with either identical treatment or permanent simplification.

The source study by Sari et al. (2022) examined strategies used for students with special educational needs at SMA Negeri 2 Bukittinggi during the pandemic. It reported individual learning approaches, parental contributions, and adjustment of questions. The archived thesis corpus contains broader evidence about a recurring tension. Teachers stated that students were not separated or discriminated against, but they also described different seating, media, questioning, and monitoring practices. Online learning made this tension visible because a common platform was sometimes used in ways that required students to adapt to the system rather than the system adapting to students.

The present article is an explicit secondary analysis. It does not claim a new dataset or repeat the prior article's question. Instead, it asks how teachers negotiated the relationship between equal treatment and differentiated accommodation in an inclusive secondary school, and how that negotiation changed when learning moved online. The analytical unit is the decision about what should remain common and what should become flexible.

This focus contributes to inclusive pedagogy in two ways. First, it treats accommodation as a pedagogical design question rather than an exception granted only after a student fails. Second, it places online learning inside inclusive education rather than treating digital delivery as a neutral medium. A platform becomes inclusive only when its information, interaction, and assessment formats can be accessed by the learners who use it.

The study addresses three questions: What forms of procedural equality were visible in the school's inclusive practice? What accommodations did teachers use to respond to learner variation? And what tensions emerged when common online platforms met different learning needs?

Method

This study is a qualitative secondary analysis of an archived case-study corpus from SMA Negeri 2 Bukittinggi. The source research used purposive sampling, non-participant observation, repeated in-depth interviews, and documentation to investigate learning strategies for students with special educational needs during the pandemic. The original dataset had previously generated Sari et al. (2022), which is cited transparently throughout this manuscript.

The thesis appendix identifies 15 informants. Two held school leadership roles as vice principal for curriculum and vice principal for student affairs. Thirteen were teachers representing Religious Education, Civic Education, Indonesian, English, Mathematics, Arts, Physical Education, History, Economics, Sociology, Anthropology, Japanese, and Guidance and Counseling. This cross-subject composition is analytically useful because inclusion was experienced as a whole-school responsibility.

For the secondary analysis, the archived material was recoded around decisions that expressed sameness or difference. Codes included regular-class placement, common curriculum, shared digital platforms, seating position, repeated explanation, use of images/video/PowerPoint/worksheets, question difficulty, monitoring, parental communication, and assessment accommodation. These codes were grouped into four result domains: procedural equality, online standardization, differentiated instructional support, and family/assessment support.

Analysis followed data condensation, display, and iterative conclusion drawing (Miles et al., 2014). The secondary interpretation did not infer diagnoses from teacher descriptions and did not compare disability categories statistically. Because the thesis documents school practices more strongly than student voice, the analysis treats teachers' accounts as evidence about institutional responses rather than as definitive statements of students' experiences.

The original research documentation includes institutional permission from the Faculty of Social Sciences, Universitas Negeri Padang, and the West Sumatra Education Office branch responsible for the Bukittinggi area. No student names or diagnoses are reproduced in the present manuscript.

The reanalysis treats the school as a bounded qualitative case and organizes evidence through reduction, thematic display, and iterative interpretation, consistent with qualitative case-study and data-analysis guidance (Creswell & Poth, 2018; Rijali, 2019).

Results and Discussion

Regular-class membership created a baseline of procedural equality

Students with special educational needs learned alongside other students in regular classrooms. Teachers did not describe a separate curriculum track or systematic withdrawal from the class. This arrangement supported social membership and reduced overt segregation. Students participated in the same school routines and, during online learning, were generally connected to the same school digital environment as their peers.

Yet even in face-to-face learning, teachers made small adjustments. Students who needed closer monitoring could be seated nearer the front. Teachers repeated explanations, checked understanding, and sometimes offered more direct prompts. These practices demonstrate that teachers did not equate shared membership with perfectly identical interaction.

The baseline pattern can therefore be described as common placement plus flexible support. The school attempted to preserve students' status as ordinary class members while allowing teachers to respond to observed needs.

Online standardization sometimes shifted the burden of adaptation to students

During online learning, Google Classroom and virtual meetings became important delivery channels. Several teachers described using the same application and broadly the same learning materials for the entire class. This was administratively efficient and avoided visible separation. At the same time, it reduced opportunities for the immediate support that teachers had used in classrooms.

One recurring logic in the interviews was that students with special educational needs would adjust to material delivered through the common platform. This language revealed a tension in inclusive design. When a platform and a task are fixed, the student becomes the party expected to accommodate the system. The archived data do not show that all students failed under this arrangement; they show that teachers recognized a need for additional contact and clarification when common delivery was insufficient.

The problem was not the use of Google Classroom itself. Digital platforms can support inclusion when materials are clear and multimodal. The empirical issue was the assumption that equal access to a platform guaranteed equal access to learning.

Teachers differentiated representation, interaction, and questioning

Teachers used multiple forms of representation to reduce comprehension barriers. The archived interviews mention videos, PowerPoint slides, pictures, and worksheets. Some teachers selected media according to whether students responded more readily to visual or audiovisual material. These choices expanded the route through which a concept could be encountered.

Interaction was also differentiated. Teachers described giving additional explanations, using simpler or more direct questions, checking understanding more frequently, and offering closer attention to particular students. Seating arrangements in face-to-face learning served the same function: proximity made observation and assistance easier without removing the student from the class.

These practices are best understood as scaffolding. The teacher did not necessarily change the social membership of the class or abandon the subject goal. The teacher changed the amount or form of support needed to engage with the task.

Parents became co-educators when teacher proximity disappeared

The move to home-based learning increased dependence on families. Teachers communicated with parents to make sure instructions were received, students joined learning activities, and difficulties were reported. Parents became a practical bridge between the digital platform and the student.

This arrangement could preserve continuity, but the data also imply uneven capacity. Parents differ in time, digital skill, confidence with school subjects, and access to devices. The school's inclusive strategy therefore became partly dependent on resources outside school control. Family partnership was useful, but it could not substitute for accessible instructional design.

Assessment accommodation was present but conceptually ambiguous

Teacher accounts indicated that assessment for students with special educational needs could be adjusted and that process was considered in evaluation. The source data also include statements about ensuring students did not receive scores below the minimum criterion and were able to progress. These practices appear motivated by protection and inclusion, but they reveal a conceptual ambiguity between accommodation and predetermined outcomes.

An accommodation changes an irrelevant barrier—for example, time, response format, wording, or access to supporting media—while preserving the competence being assessed. Automatically changing a score is different because it may reduce the information value of assessment. The present secondary analysis does not audit the school's assessment policy; it identifies a need for clearer distinctions in inclusive practice.

Table 1. Equality and accommodation in the archived school practices

Dimension	Common/equal element	Differentiated accommodation
Class membership	Learning in regular classes	Closer seating and monitoring
Digital access	Common school platforms	Additional explanation and multimodal media
Learning task	Shared subject goals	Simpler prompts, repeated instructions, scaffolded questions
Home learning	Common schedule and materials	Parent-teacher communication and family support
Assessment	Participation in school assessment	Adjustment of process, format, or support where needed

Source: Authors' reanalysis of the archived research data.

Cross-subject evidence showed differentiation as a distributed teacher practice

The 15-informant archive makes it possible to see accommodation across subjects rather than as the practice of one specialist teacher. The participant list includes two vice principals and teachers of Religious Education, Civics, Indonesian, English, Mathematics, Arts, Physical Education, History, Economics, Sociology, Anthropology, Japanese, and guidance and counselling. This breadth matters because students with special educational needs were not taught in a separate specialist class; they encountered the full subject timetable of a regular senior high school. Inclusive practice therefore depended on ordinary subject teachers being able to make small but consequential adjustments.

Across the archive, these adjustments were usually micro-accommodations rather than individualized curricula. In face-to-face lessons, teachers moved students closer to the front, monitored comprehension more frequently, invited them to answer manageable questions, repeated explanations, and used visual materials when verbal exposition was insufficient. During online learning, teachers used Google Classroom, Google Teams, images, videos, PowerPoint slides, and worksheets. The source data do not show a formal individualized education plan for each learner. Instead, differentiation emerged pragmatically from teachers' judgments about attention, comprehension, communication, and task difficulty.

This distributed pattern is analytically important because it separates inclusion from specialist ownership. Angreni and Sari (2022) similarly found that teachers in inclusive settings need to adapt strategy and media to learner characteristics, while Marlina et al. (2022) show that differentiated task structures can support social and academic participation. The present results add that such adaptation must occur across subjects if inclusion is to be experienced throughout the school day rather than only in a designated support period.

The same-platform principle revealed a design contradiction

One of the clearest contradictions in the dataset appears in the statement of an English teacher who described online instruction through the school-approved platforms and emphasized that the process was conducted in the same way for students with and without special educational needs. The intention was egalitarian: no student should be separated or visibly treated as less capable. Yet the same archive also records teachers providing additional explanations, different media, simpler questions, closer monitoring, and parent-mediated support precisely because identical delivery did not produce identical access.

The result suggests that procedural sameness and pedagogical equality were being conflated. A common platform can protect membership in the same learning community, but equal access depends on whether the content is perceivable, understandable, navigable, and responsive to different learning profiles. Research on Universal Design for Learning reaches a similar conclusion: accessibility is strengthened when multiple means of representation, engagement, and response are planned in advance rather than added after a learner encounters failure (AlRawi & AlKahtani, 2022; Cumming & Rose, 2022).

(Equality or Differentiation...)

The pandemic made this contradiction more visible because teacher proximity disappeared. What could previously be corrected through a quick repetition or seat adjustment had to be mediated by digital content and family assistance. Reviews of distance learning for learners with disabilities likewise identify accessibility, self-regulation, teacher readiness, and reasonable accommodation as central conditions rather than peripheral technical issues (Cataudella et al., 2021a; Petretto et al., 2021a, 2021b).

Discussion

Procedural equality is necessary but not sufficient for inclusion

The results show why inclusive education cannot be reduced to placement. Regular-class membership is ethically and socially important because it prevents segregation and communicates that students belong to the same learning community. But belonging does not eliminate barriers. Angreni and Sari (2022) and Nugroho and Mareza (2016) similarly emphasize the need to align learning strategies with student needs.

The equality–equity distinction clarifies the apparent contradiction in teacher accounts. Teachers could be correct when saying students should not be discriminated against and also correct when providing different support. Equality applies to rights, dignity, participation, and meaningful expectations. Equity applies to the resources and pathways needed to make those rights real.

This interpretation avoids two extremes. Identical treatment can ignore differences in access; permanent simplification can lower expectations because of a label. Inclusive pedagogy requires meaningful goals while adjusting the route to them.

Differentiation should be planned before difficulty appears

The media practices in the case—video, images, PowerPoint, worksheets, repeated explanation—were often responsive: teachers adjusted when they saw that a student needed help. Such responsiveness can be strengthened by anticipatory design. A lesson can provide more than one representation from the beginning, clear written and oral instructions, examples, and structured opportunities for clarification.

Marlina et al. (2022) demonstrate how differentiated task structures can support students with special educational needs. Pandemic research likewise shows that relying on a single online pathway can create difficulties for learners and families (Minsih et al., 2021; Hasanah & Marlina, 2022). The present findings therefore support a shift from reactive accommodation to proactive flexibility.

Proactive differentiation also reduces stigma. When multiple students can choose between text, visual examples, or guided prompts, support is not marked as a special exception for one learner. The teacher can preserve common learning outcomes while varying representation, interaction, and response format.

Online inclusion requires accessible design, not simply platform access

The pandemic made visible a broader principle that remains relevant in blended education. Digital access has at least three layers: connection to a platform, access to content, and access to meaning. A student may be logged into a virtual class but still be unable to follow the pace, interpret a dense instruction, or request clarification in time.

Arsani et al. (2021) show how parental roles expanded during online learning. Yet dependence on parents can transfer educational inequality into the home. School design should minimize unnecessary demands on families by using predictable routines, concise instructions, asynchronous options, and teacher contact channels.

The post-pandemic lesson is that digital tools should be reviewed for accessibility as ordinary educational infrastructure. Teachers need professional development not only on how to operate a platform but on how to design multimodal information and flexible participation through it.

Inclusive assessment should protect validity as well as participation

Accommodation is defensible when it removes an access barrier that is irrelevant to the construct being assessed. It should not automatically reduce the intellectual demand of a task. For example, changing representation, response mode, timing, or scaffolding can preserve a common learning goal while allowing different routes to demonstrate it.

Schools rightly seek to prevent students with disabilities from being harmed by assessments that measure barriers rather than knowledge. However, fairness is not produced by making every score acceptable. It is produced by ensuring that the assessment actually measures the intended competence.

When reading speed is not the target competence, additional time or simplified navigation may be appropriate. When written expression is not central, an oral response might provide a valid alternative. When a concept is the target, images or concrete examples may support access. These accommodations can preserve standards while reducing irrelevant obstacles.

Clear assessment principles can also protect teachers. Without shared guidance, individual teachers may improvise different rules, making inclusion dependent on personal judgment. Whole-school protocols for accommodation, documentation, and review would turn individual goodwill into institutional capacity.

From integration to pedagogical equity

The study's contribution is to interpret the original strategy data as a negotiation between integration and equity. Sari et al. (2022) documented what teachers did; the present analysis explains why those practices matter as decisions about sameness and difference. The central criterion becomes participation: can the student access information, take part in interaction, and demonstrate competence?

An inclusive school should therefore not be judged only by the number of students with special educational needs enrolled in regular classes. It should examine whether those students can follow lessons, receive useful feedback, complete meaningful tasks, develop peer relationships, and progress through evidence-based assessment.

The case shows that teachers were already improvising many forms of accommodation. The next institutional step is to make those practices explicit, share them across subjects, and connect them to professional learning.

From reactive accommodation to anticipatory inclusive design

The central implication of the findings is temporal: accommodation should move earlier in the design process. In the archive, many adjustments were reactive. A teacher noticed that a learner was not following, then repeated the explanation, changed the question, or involved a parent. These responses are valuable, but they depend on the teacher first detecting difficulty. Anticipatory design asks what predictable barriers can be removed before instruction begins. A lesson can provide concise written instructions alongside oral explanation, visual examples alongside text, captions for video, flexible response formats, and a clear sequence of tasks for all learners. Such options reduce the need to mark one student publicly as the person who requires a special version.

This anticipatory approach does not mean lowering the intellectual purpose of a lesson. Reyes et al. (2022) found that online academic interventions for students with disabilities are most defensible when they preserve participation in the academic task while changing access conditions. Similarly, UDL reviews emphasize reducing irrelevant barriers while maintaining meaningful learning goals (AlRawi & AlKahtani, 2022; Cumming & Rose, 2022). In the present case, the strongest teacher adaptations were those that changed representation or support without removing students from the shared lesson.

The same principle should govern assessment. The archived practice of ensuring that students with special educational needs were not given scores below the school minimum was intended as protection, but a guaranteed score can blur the distinction between accommodation and achievement. An inclusive assessment should instead modify the route by which competence is demonstrated when the standard route creates an irrelevant barrier: for example, clearer instructions, additional processing time, oral rather than written response when appropriate, or segmented tasks. This preserves information about what a learner can do while avoiding the assumption that fairness requires identical conditions.

The post-pandemic relevance is substantial. Although emergency remote teaching has ended, blended learning, digital assignments, learning-management systems, and online resources remain part of schooling. Petretto et al. (2021a) argue that lessons from emergency distance learning should inform more durable inclusive design rather than disappear when schools reopen. The SMA Negeri 2 Bukittinggi case supports that conclusion. The challenge is not to create a separate digital track for students with special educational needs, but to make the ordinary digital environment flexible enough for learner variability.

The Indonesian policy basis for inclusive schooling predates the pandemic, and the case therefore reflects implementation of an established inclusion mandate rather than an emergency policy experiment (Kementerian Pendidikan Nasional Republik Indonesia, 2009). Earlier Indonesian work had already highlighted teacher attitudes, implementation conditions, and inclusive strategies (Elisa & Wrastari, 2013; Handayani & Rahadian, 2014; Nugroho & Mareza, 2016). The present reanalysis builds on that foundation by showing how emergency online learning exposed a specific design tension between sameness and accommodation.

School-level coordination is needed for consistent inclusive practice

A further implication concerns teacher learning. The archive shows that inclusive decisions were distributed across thirteen subject teachers rather than concentrated in a specialist unit. This creates a coordination problem: one learner may encounter different expectations and forms of support across Mathematics, Languages, Social Sciences, Arts, and Physical Education. Without shared principles, accommodation can become idiosyncratic—generous in one class, absent in another, or tied to an individual teacher's confidence. Research on inclusive education has long shown that teacher attitudes and perceived competence shape the quality of classroom participation (Elisa & Wrastari, 2013). The pandemic intensified this dependence because

ordinary informal coordination was disrupted, a problem also reflected in research on teachers' self-efficacy during emergency teaching (Cataudella et al., 2021b).

For this reason, the case supports a school-level minimum protocol for inclusive digital instruction. Such a protocol need not prescribe a separate lesson plan for every student. It can establish common expectations: key instructions should be available in more than one mode; videos should be accompanied by captions or written summaries when relevant; complex tasks should be segmented; teachers should provide a predictable channel for clarification; and students who need additional processing time should be able to receive it without public labelling. The legal framework for inclusive education in Indonesia already places responsibility on schools to provide appropriate educational services, while implementation studies show that translating regulation into classroom practice remains uneven (Handayani & Rahadian, 2014; Kementerian Pendidikan Nasional Republik Indonesia, 2009).

Family involvement should also be designed as partnership rather than substitution. The source data show that parents helped students stay engaged during online learning, a pattern also reported by Arsani et al. (2021) and Minsih et al. (2021). Yet when the family becomes the main interpreter of instructions, the accessibility problem has merely moved from school to home. A sustainable arrangement requires teachers to communicate learning goals and support needs clearly while keeping pedagogical responsibility within the school. Parents can reinforce routines and provide contextual knowledge about the learner, but they should not have to reconstruct inaccessible instruction.

Finally, inclusion should be evaluated through participation evidence rather than placement alone. The school had maintained an inclusive setting since 2013 and students with special educational needs were enrolled in regular classes, which is an important institutional achievement. The next evaluative question is whether students can access explanations, contribute to classroom interaction, complete meaningful tasks, and demonstrate learning through valid forms of assessment. Nugroho and Mareza (2016) describe inclusion as requiring strategies that respond to learner characteristics; the present case extends that claim by showing how digital standardization can obscure participation gaps even when formal placement is inclusive. A stronger monitoring system would therefore examine participation, accessibility, and learning evidence across subjects.

Student voice should become evidence of inclusive quality

The archive also indicates a methodological lesson for schools evaluating inclusion: teacher intentions are not enough to establish whether an accommodation works. Teachers in the case described seating adjustments, repeated explanations, simpler questions, visual materials, additional monitoring, and parental communication. These practices demonstrate responsiveness, but their educational value ultimately depends on how students experience them. A support strategy that seems helpful to an adult may still be confusing, stigmatizing, overly dependent on family assistance, or insufficient for meaningful participation. For this reason, inclusive quality should be evaluated with evidence from students as well as evidence about students.

A practical implication is to build brief student-feedback routines into inclusive teaching. After a learning unit, teachers can ask whether instructions were understandable, which representation was most useful, where participation became difficult, and what type of support enabled the student to work more independently. Such feedback would complement teacher observation and family communication rather than replace them. It would also help distinguish accommodation that increases access from accommodation that unintentionally lowers challenge. This distinction is consistent with the equity argument developed in the present study: common educational rights and meaningful learning goals can coexist with differentiated pathways for reaching them.

Student voice is especially important for assessment. The archived data show uncertainty around what equitable grading should mean for students with special educational needs. A stronger approach would separate access accommodation from the academic judgment being made. Extra time, simplified instructions, alternative response formats, or assistive media may change how evidence is produced without changing the competence being evaluated. Systematically documenting which accommodation was used and asking students whether it reduced a genuine barrier would make assessment decisions more transparent across subjects. In this sense, inclusion becomes an evidence-informed school practice rather than a collection of individual teacher improvisations.

Limitations

The study is limited to one inclusive secondary school and uses an archived dataset collected during an exceptional pandemic period. The corpus is rich in teacher and school-leadership perspectives but does not provide equally systematic first-person accounts from students with special educational needs or their families. Disability characteristics are not used as comparative categories. Future research should prioritize student voice, family experience, direct analysis of accessible learning materials, and classroom observations that compare planned accommodations with actual participation.

Conclusion

Inclusive learning at SMA Negeri 2 Bukittinggi combined procedural equality with practical differentiation. Students learned within regular classes and generally used common school platforms, while teachers adjusted seating, media, explanation, questioning, monitoring, and family communication when needs became visible.

The online period revealed the limit of 'the same for everyone.' Equal access to a platform did not necessarily produce equal access to learning. Inclusive pedagogy therefore requires equitable accommodation: common rights and meaningful goals accompanied by flexible pathways for representation, interaction, and assessment.

The most important institutional implication is to move from individual improvisation to shared design. Schools should develop accessible digital routines, differentiated lesson structures, and clear assessment accommodations so that support is planned rather than dependent on a student first experiencing failure.

Declarations

Author contribution

Author 1: developed the main research idea and objectives, designed the research methodology, conducted data collection and investigation, performed the data analysis, and prepared the first draft of the manuscript. Author 2: contributed to the development and implementation of the research methodology, supported the data collection and investigation process, and reviewed and revised the manuscript to improve its academic quality, clarity, and structure. Author 3: provided input into the research concept and direction, supervised and guided the overall research process, reviewed and improved the manuscript, and contributed to obtaining financial support or research funding

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Conflict of Interest

The authors declare that there is no conflict of interest related to the publication of this article.

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