

Article

## Beliefs in Miraculous Healings, Religiosity and Meaning in Life

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**Abstract:** Throughout centuries, many interpretations of miraculous healings have been offered by philosophers, theologians, physicians and psychologists. Different approaches to miracles originate from the differences in understanding of causative factors, concepts of nature and the relationship between God and nature. Despite many skeptical arguments, a vast majority of people (approximately 70%) in modern Western societies share a belief in miracles and millions of sick people pilgrimage to sanctuaries seeking their occurrence. The aim of the research was to describe the social perception of miraculous healings, and the relationship between beliefs in miraculous healings, religiosity and meaning in life. A survey was conducted on a group of 178 respondents aged 18 to 30 ( $M = 21.5$ ;  $SD = 2.31$ ), 90% Catholics. The obtained results show that it is possible to describe the perception of miraculous healings in category of the essence of the causative factors (natural/supernatural) and definiteness (defined/undefined). The majority (88%) of the respondents believed in miracles and most frequently associated them with God's action/intervention, less often with the still undiscovered possibilities of the human organism or the nature, and the least with medical biases. Respondents with stronger religiosity more often understood miraculous healings as an act of God than the activity of unspecified supernatural powers. Moreover, higher religiosity and understanding of miraculous healings as an effect of the supernatural specified determinant was connected with higher meaning in life.

**Keywords:** miraculous healings; religiosity; meaning in life

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## 1. Introduction

Beliefs in miracles, among them in miraculous healings, have been present in human culture since its origins. They have attracted the attention of ordinary people, artists and thinkers. For centuries, many philosophers, theologians and scientists offered their interpretations of miraculous healings. In contemporary times we can also observe the debate about miraculous healings in the medical society [1–8]. The last official confirmation of an inexplicable healing in Lourdes occurred in 2005 [9]. The Vatican Congregation for the Causes of Saints proclaimed 347 decrees about miracles between 1983 and 2004 [10,11]. The majority of Polish physicians and medical students (approximately 70%) believe in miracles defined as supernatural phenomena caused by God [12]. A great majority of people in modern Western societies (including physicians) share a belief in miracles. According to Mansfield it may be as much as 80% of the Western population. The faith in miraculous healing is stronger among women, African-Americans, Evangelical Protestants, the poorer, sicker, and less educated and majority of respondents understand that God acts through the hands of the physicians [13]. Beliefs in miraculous healings are the part of beliefs in miracles, and miraculous healings are the most popular examples of miracles. However, in many studies it is difficult to determine how respondents perceive or define miracles.

There have been numerous definitions of miracles, and it is difficult to present a detailed and commonly accepted one. The word “miracle” comes from the Latin *miraculum*, which is derived from *mirari* (to wonder). Thus, the most general epistemological characterization of a miracle is an event that causes wonder and is in some way unusual or contrary to our expectations [14–16]. Ontological aspects of miracles to which many definitions point to treat miracles as extraordinary and in some sense beyond (above, contrary to) nature. A subjective conviction of a divine intervention also seems to be very common for the miracle (miraculous phenomena).

A detailed history of philosophical thinking about miracles was described by J. Pawlikowski [8]. Different approaches to miracles originated from the differences in understanding the notion of God (personal or impersonal, transcendent or immanent), nature (deterministic or indeterministic) and the relationship between God and nature. If one perceives laws of nature as relative and God as personal and transcendent but acting, usually one believes in miracles. It is also possible to be open to the transcendent interpretation of the miraculous phenomena but has not the personal concept of God and understand miracles as the effect of supernatural powers. If one perceives nature as a deterministic system and denies the existence of God or His ability to act in nature, usually there is no space for theistic interpretation of miracles, thus miracles are understood as the effects of unknown supernatural factors, still undiscovered possibilities of the nature, the effect of a medically ambiguous diagnosis, medical error or bias. It is possible to determine the typology of understanding of miraculous healings based on the essence of the causative factors (natural or supernatural) and their definiteness (defined/undefined). Referring to the philosophical concepts presented above it can be assumed that belief in miraculous healings can be described in two categories: the essence (nature) of the causative

factor as natural vs. supernatural and its definiteness as undefined vs. defined-miraculous healings can be explained as a result of supernatural defined (SD, in other words transcendent specified cause, e.g., God) or undefined factors (SU, transcendent unspecified, e.g., unknown supernatural powers). They can also be understood as an effect of natural defined (ND, in other words immanent specified cause, e.g., the effect of medical biases) or natural undefined factors (NU, immanent unspecified, e.g., still undiscovered possibilities of the human organism, unknown natural energies and laws). Some examples are listed below. This theoretical concept is present in the model TMMHB in later part of the manuscript (Scheme 1).

We can provide many examples of supernatural interpretations of miracles. According to the Bible, God created the world, and thus all the phenomena are directly related to Him. Consequently, miracles could be treated as a special sign (Hebr. *Oth*, Gr. *semeion*, Eng. *sign*) given by God to Man (SD) [17]. According to St. Thomas Aquinas (1225–1274) “Those events then are properly to be styled miracles, which happen by divine power beyond the order commonly observed in nature” (*Summa Contra Gentiles*, 3.101). In his concept, the cause of the miracle is external to the world, it surpasses nature, and therefore that could be only God (SD). Some modern and contemporary thinkers also defended the understanding of miracle as the act of God (SD), e.g., Blaise Pascal ([18], lines 803–55) or C. S. Lewis [19]. The belief in mysterious powers that could influence nature and human life is also present in New Age literature, but is understood as the effect of cosmic energy or spiritual powers (SU), or as unknown laws of nature or mysterious human mind powers (NU) [8].

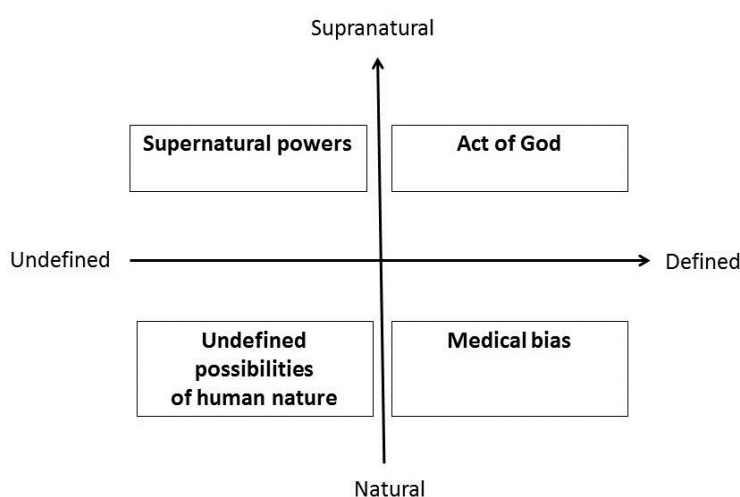
It is also possible to enumerate many examples of natural interpretations of miracles. Ancient philosophers such as Pythagoras or Empedocles were believed to be thaumaturges, although they themselves denied performing miracles and said that they simply knew nature (ND). Celsus (2nd c.) claimed that the gods were not interested in human affairs and miracles could only be the effect of an error in diagnosis (ND) [20,21]. In the Middle Ages thinkers distinguished between the *miraculum*, understood as God’s work (SD), and the *mirabile* perceived as an exceptional, curious event, that could not be the work of God but that of a magician or trickster (ND or NU). In modern times there were many ideas concerning miracles as natural phenomena. Baruch Spinoza, Immanuel Kant, representatives of deism (e.g., John Toland) stated that the immutability of laws of nature excludes the possibility of God’s intervention in the natural world, however they did not define the causative factor—for them a “miracle” was an incomprehensible natural fact (NU) [22,23]; ([24], chapter 6, lines 1–134). David Hume (1711–1776) believed that the invariability of laws of nature and weak human evidence spoke against miracles and only the faith gave people power to believe in things that are against experience (NU) (*Enquiries*, p. 114)<sup>1</sup> [25]. In the 19th century J.M. Charcot, believed that healings in Lourdes had a natural explanation—hysteria and hypnosis (ND) [26], but A. Carrel (1873–1944), Nobel Prize laureate (1912), acknowledge the mysterious character of the place and

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<sup>1</sup> C. S. Lewis arguing for theistic interpretation of miracles and analyzing the Humean critique of miracles wrote: “we know the experience against them [miracles] to be uniform only if we know that all the reports of them are false. And we can know all the reports to be false only if we know already that miracles have never occurred. In fact, we are arguing in a circle.” [19].

understood miracles as an effect of unknown powers of nature (NU)<sup>2</sup> [28]. From the perspective of the process philosophy (A.N. Whitehead) miracles are a very rare phenomena and can neither be confirmed nor excluded using modern scientific methods (NU) [29–31]. Most theoretical disputes on the possibility of miracles concentrate on the concept of a miracle perceived as contrary to laws of nature (an event that is *contra naturam*); comprehending miracles as signs, manifestations of nature's powers at God's command or subjective experience is not so controversial.

Referring to the philosophical concepts presented above and in Pawlikowski's work [8], it can be assumed that beliefs on miraculous healings can be described on two categories: the essence (nature) of the causative factor as natural *vs.* supranatural and its definiteness as undefined *vs.* defined (Theoretical model of miraculous healings beliefs, TMMHB; see Scheme 1). Vertical axis describes the belief that miraculous healings are caused by factors associated with natural *vs.* supranatural (transcendental) elements. In turn, the horizontal axis refers to understanding miraculous healings using defined (specified) and undefined elements (difficult to define, specify or identify). On the quadrants of the scheme the authors propose hypothetical names relating to the perception of miraculous healings.



**Scheme 1.** Theoretical model of miraculous healings beliefs (TMMHB).

Analyses conducted by contemporary philosophers (e.g., Ch. Hartshorne, R. Swinburne) underlines that the perception of miracles is an outcome of metaphysical presuppositions and not scientific data [32,33]. It is interesting to know how people understand miraculous healings and how this belief interacts with other personal, sociological and psychological factors, such as: age, gender, ethnicity, household incomes, level of experienced stress, life satisfaction, religiosity and beliefs [34]. It seems that religiosity may be of particular importance as to a large extent it shapes ideas about the relationship between the material and spiritual world and is connected with life's meaning [35].

The premise for interconnections between the belief in miraculous healings, religion and the meaning of life can be the Concept of Personal Meaning. According to it, the meaning of life is defined as “the awareness of an order, coherence, purpose in life of an individual and the

<sup>2</sup> A. Carrel as a young physician traveled to Lourdes with a group of sick people, saw the inexplicable recovery of one of his patients [27].

accompanying sense of accomplishment” [36]. This multidimensional reality is created by structural components of sense, which include the source, scope and depth of meaning. Within the framework of this concept, four main levels of meaning’s development and discovering its depth are distinguished. They are divided in accordance with the degree of transcendence of the “I”. The first level is characterized by the focus of the individual on him/herself, his preoccupation with hedonistic pleasures and caring only for his/her needs. The second level is reflected by devoting time and energy for implementing one’s own potentiality, using one’s own skill and self-improving. On the other two levels, individuals in their actions, decisions and activities go beyond his/her own “I”, transcendence occurs and the individual begins to be opened and sensitized to other people and the supernatural. Level three is thus associated with serving others and belonging to a larger community, becoming engaged in political affairs and pro-social activities. The last level (4) is connected with receiving values, which go beyond the individual and the recognition of the ultimate goal—the highest level of transcendence of the “I”. Current studies indicate that people experiencing meaning from the last two levels have a greater sense of accomplishment and feel higher life satisfaction compared with those experiencing meaning from the Reker’s lower levels [37].

The above theoretical arguments and studies indicate that transgression, being open for eternal values and towards the supernatural reality helps to increase a sense of purpose and satisfaction with life [38]. It has also been indicated that the sole acceptance of God’s existence and religious involvement (one of the aspects of religiosity) help to find the meaning of life. It seems that the meaning will be greater, if the greater the openness to the Absolute is, especially in terms of the belief in the possibility of “His” intervention in the world. Thus, the level of the acceptance of the transcendent reality depends not only on the belief in God but also in the conviction of his intervention in the real world e.g., by miraculous healings.

The aim of the research was to describe the perception of miraculous healings, verify the TMMH, and analyze the relationship between beliefs in miraculous healings, religiosity and meaning in life. It was hypothesized that perception of miraculous healings is heterogeneous (we propose four dimensions) and that the different perceptions of miraculous healings are associated with religiosity and the meaning in life in different way (positive or negative).

## 2. Materials and Methods

The study was conducted using an online questionnaire distributed voluntarily via e-mail to students of psychology. During the research, data from 200 participants had been collected, but only 178 (89%) questionnaires were accepted. The respondents’ ages were: 18 to 30 ( $M = 21.5$ ;  $SD = 2.31$ ). The majority of the respondents were women (69.7%) and people of Roman Catholic religion (90%). Respondents completed three research tools and short demographics. In order to determine the perception of miraculous healings an experimental version of the Beliefs about Miraculous Healings Scale (BMHS) was applied. It allows for subjective assess of miraculous healings as: Act of God (1 item), Undefined possibilities of human nature (3 items), Supernatural powers (1 item) and Medical bias (2 items). This method consists of 7 claims (e.g., a miraculous healing is a result of supernatural forces”) rated on a scale from 1 to 4 where 1 strongly disagree and 4 strongly agree [39]. The results in multi-items dimensions are computed as mean scores. Religiosity was measured using the Duke

University Religion Index (DUREL) [40]. It is a self-administered five-items measure allows us to assess three aspects of religiosity: Organizational Religious Activity (one item, ORA), Non-organizational Religious Activity (two items, NORA), Intrinsic Religiosity (three items, IR). The results of the method are sum of points obtained from questions assessed on six-point (ORA, NORA) and five-point (IR) scales. The level of life's meaning was analyzed using the Meaning in Life Questionnaire (MLQ) [41]. MLQ is a 10-items tool that investigates two dimensions of meaning in life: the presence of meaning (five items) and the search for meaning (five items). Each statement was assessed on five-point Likert's scale.

### 3. Results

The collected data were statistically analyzed using the SPSS v.22. A vast majority (89%) of the respondents declared the belief in miracles, as a phenomenon or event that for various reasons does not have scientific explanation. The starting point of the basic analyses was to determine in what dimensions the statements included in the methods capturing the perception of miraculous healings were located. In accordance with the literature mentioned in the introduction part, the existence of categories which will arrange themselves on the axis of Natural vs. Supernatural and Undefined vs. Defined was assumed. The results of the factor analysis (Varimax method) revealed the existence of four dimensions describing the belief in miraculous healings (Table 1). These dimensions include unknown possibilities of the human nature, supernatural powers, medical bias and act of God. The solution explains 88.6% of variance. The obtained results are coherent with the above-mentioned theoretical considerations and may point to the diversity in understanding and the interpretation of miraculous healings.

**Table 1.** Results of the factor analysis for the Beliefs about Miraculous Healings Scale (BMHS) \*.

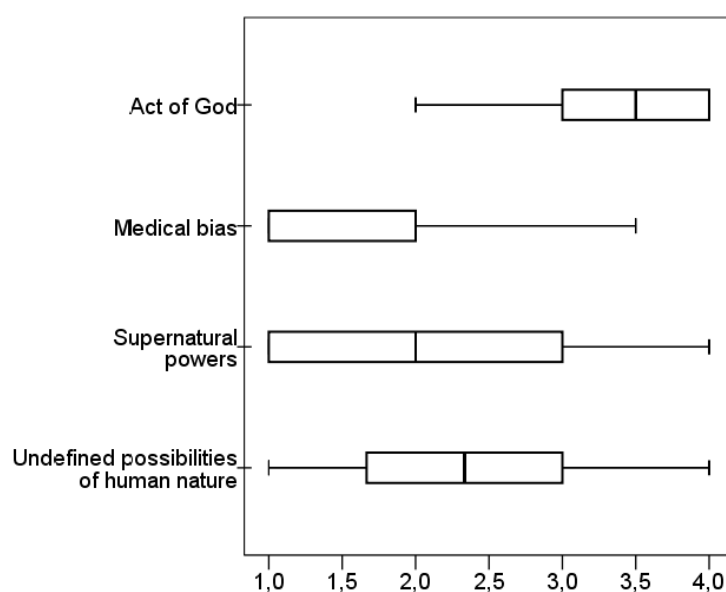
|  | Dimension                                  |                        |                 |               |
|--|--|------------------------|-----------------|---------------|
|  | Undefined possibilities<br>of human nature | Supernatural<br>powers | Medical<br>bias | Act<br>of God |
| Consequence of still undiscovered<br>human organism potentials | 0.876                                      |                        |                 |               |
| Effect of unknown natural laws                                 | 0.778                                      |                        |                 |               |
| Effect of human psychic action                                 | 0.754                                      |                        |                 |               |
| Effect of supernatural powers                                  |  | 0.994                  |                 |               |
| Effect of medical data manipulation                            |  |                        | 0.885           |               |
| Result of medical biased diagnosis                             |  |                        | 0.822           |               |
| Act of God   |  |                        |                 | −0.860        |

\* Only factor loadings > 0.5 are displayed.

Respondents obtained the highest indicators in the dimension that describes miracles as an act of God (Figure 1), the lowest, in the dimension which treats miracles as the manipulation of medical data and medical bias.

The majority of the distinguished dimensions of BMHS is associated with the variables taken into consideration during the research (Table 2). Explaining miracles through natural factors negatively

correlates with all the categories of religiosity. Those more religiously involved to a lesser extent treat miracles as a result of undiscovered possibilities of the organism, unknown laws of nature, the effects of the human psyche, medical data manipulation and diagnostic errors. These dimensions are also associated with the level of satisfying the sense of life. In case of treating miracles in terms of a supernatural defined factor (God) the correlation is positive. A miracle as the result of God's activity coexists with both the religious commitment as well as with the sense of meaning in life. Interestingly, none of the religious variables included in the study and describing the aspects of meaning in life correlates with the belief that miracles are an effect of undefined supernatural forces. Additionally, no statistically significant relations were found between the interpretation of miraculous healings and the search for meaning in life.



**Figure 1.** The distribution of results for various beliefs on miraculous healings (On the figure are presented minimum, maximum, median and interquartile range in each dimension).

**Table 2.** The relationship between perception of miraculous healings, religiosity and aspects of the meaning of life (Spearman's rank correlation coefficient).

|   | (1)       | (2)                 | (3)    | (4)                 | (5) | (6) | (7) | (8) | (9) |
|---|-----------|---------------------|--------|---------------------|-----|-----|-----|-----|-----|
| Act of God (1)                              | -         |                     |        |                     |     |     |     |     |     |
| Medical bias (2)                            | -0.600 ** | ( $\alpha = 0.87$ ) |        |                     |     |     |     |     |     |
| Supernatural powers (3)                     | -0.007    | 0.144               | -      |                     |     |     |     |     |     |
| Undefined possibilities of human nature (4) | -0.630 ** | 0.667 **            | 0.122  | ( $\alpha = 0.87$ ) |     |     |     |     |     |
| Organizational religious activity (5)       | 0.655 **  | -0.478 **           | -0.025 | -0.526 **           | -   |     |     |     |     |

Table 2. Cont.

|   | (1)      | (2)       | (3)    | (4)       | (5)      | (6)      | (7)                 | (8)                 | (9)                 |
|---|----------|-----------|--------|-----------|----------|----------|---------------------|---------------------|---------------------|
| Non-organizational religious activity (6) | 0.469 ** | −0.378 ** | −0.024 | −0.415 ** | 0.676 ** | -        |                     |                     |                     |
| Intrinsic religiosity (7)                 | 0.680 ** | −0.472 ** | −0.037 | −0.574 ** | 0.793 ** | 0.707 ** | ( $\alpha = 0.86$ ) |                     |                     |
| Presence of meaning (8)                   | 0.171 *  | −0.248 ** | −0.057 | −0.168 *  | 0.145    | 0.326 ** | 0.281 **            | ( $\alpha = 0.84$ ) |                     |
| Search of meaning (9)                     | 0.024    | 0.093     | 0.089  | 0.038     | 0.059    | −0.081   | 0.000               | −0.391 **           | ( $\alpha = 0.85$ ) |

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; On the diagonal are presented Cronbach's alpha reliability coefficients for multi item dimensions.

#### 4. Discussion

Results indicate the existence of a relationship between the perception and understanding of the miraculous healings, religiosity and the respondents' meaning of life. Such a relationship is confirmed by few previous reports, which not always specify the definition of events reported as miraculous [42,43] or place general description [7,13,44]. In the interpretation of the relationship between the acceptance of miracles and the religiosity and the meaning in life it seems essential to establish the respondent's beliefs on the cause of miraculous phenomenon. Such assertion is possible through the application of a BMHS (Beliefs about Miraculous Healings Scale) based on Theoretical Model of Miraculous Healings Beliefs (TMMHB). This research tool shows correlations between the understanding of a miracle as a phenomenon of a supernatural origin (SD, e.g., God), religiosity and the sense of meaning in life occur. The credibility of this observation is confirmed by the existence of a negative correlation between understanding miraculous healings as natural phenomenon (ND, NU) and religiosity and the sense of meaning in life. The lack of a relationship between understanding miracles as phenomenon resulting from the activity of undefined supernatural causes (SU) is interesting. Perhaps this is due to the double ambiguity of the described category connected to transcendence and indeterminacy. Because of a metaphysical distance (transcendence) and epistemological indeterminacy, this category cannot create religious behaviors nor influence the meaning in life. This observation requires further in-depth research.

Obtained results seem to confirm the validity of the Theoretical Model of Miraculous Healings Beliefs (TMMHB) proposed in the introduction. Different perceptions of the essence of causative factor of miraculous healings (natural/supernatural) and his definiteness (defined/undefined) relevantly differentiate the attitudes and correlate with religiosity and meaning in life in different way. A negative correlation has been observed between the understanding of miracles as phenomenon belonging to the sphere of nature, religious activity and the sense of meaning in life, and at the same time a positive correlation was visible within the supernatural sphere. It is coherent with other researches which show that religiosity and believing in miracles have protective effect in terms of being exposed to stress and trauma, e.g., Manglos [34], in his study conducted on a group of American teenagers (aged 13–17) identified the protective effect of believing in miracles understood as a God's intervention in relation



to various types of traumatic experience. On the other hand, the influence of traumatic experience on the level of acceptance of the relationship between supernatural events and the intervention of the divine factor should also be analyzed.

The Beliefs about Miraculous Healings Scale may be useful tool in the research focused on perception of miraculous healings. Despite certain limitations it may contribute to conducting further research on the correlations between understanding of the miraculous healings and variables characterizing the existential situation of a person in various life periods. It may be also useful for comparative studies in communities shaped by different religious traditions concerning the understanding of transcendence, e.g., comparing various groups of followers of monotheistic religions, Buddhism and animistic beliefs. An interesting perspective is the compilation of perceptions of miracles with religious thought styles. Analysis of the content of the dimensions found in the Beliefs about Miraculous Healings Scale indicates that such a way of perceiving miracles is close to the perspective of religious cognitive styles proposed by D. Wulff [45]. According to him it is possible to enumerate four styles of thinking about religion (Orthodoxy, External Critique, Relativism, Second Naiveté) located on two axes; Exclusion *vs.* Inclusion of Transcendence and the Literal *vs.* Symbolic way of interpreting the content of religious beliefs [46–48]. From this perspective it seems reasonable to conduct research not only within the Polish culture but also in other European countries, experiencing secularization processes.

The task that should be undertaken in further evaluation of the hermeneutical possibilities of the theoretical model of beliefs in miraculous healings (TMMHB) is the broadening of the scope of age groups, and their diversity in terms of existential experience and religious traditions. The research presented in this article was conducted in a religiously homogenous group of Polish students, who were shaped by the Catholic tradition. A certain limitation of the used research tool is determining its psychometric properties given a limited group (young people) and a small number of items in each of the dimensions. The short form is the advantage of this research tool and it can be used among advanced age groups of respondents. In subsequent studies it would also be beneficial to take into consideration the sense of control localization and superstition as two aspects, which indicate the existence of an external reality, which could affect the actions of an individual.

## 5. Conclusions

Vast majority of respondents understand miraculous healings as a result of God's action and not the effect of natural unknown factors. Respondents with lower religiosity more often believe that miraculous healings are the activity of unspecified supernatural powers or results of medical biases than an act of God. Higher religiosity and understanding of miraculous healings as an effect of the supernatural specified determinant was connected with higher meaning in life.

## Author Contributions

Jakub Pawlikowski: designing research, analyzing data, writing paper; Michal Wiechetek: designing research, performing research, analyzing data, writing paper; Jaroslaw Sak: analyzing data, writing paper; Marek Jarosz: analyzing data. All authors read and approved the final manuscript.

## Conflicts of Interest

The authors declare no conflict of interest.

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