

# Automatic Migraine Classification Using Artificial Neural Networks

## Checking using STARD

Section & Topic	No	Item	Reported on page #
<b>TITLE OR ABSTRACT</b>			
	1	Identification as a study of diagnostic accuracy using at least one measure of accuracy (such as sensitivity, specificity, predictive values, or AUC)	Title ("classification" is used to indicate the type of study, and "neural networks" to indicate the technique)
<b>ABSTRACT</b>			
	2	Structured summary of study design, methods, results, and conclusions (for specific guidance, see STARD for Abstracts)	Abstract
<b>INTRODUCTION</b>			
	3	Scientific and clinical background, including the intended use and clinical role of the index test	Introduction
	4	Study objectives and hypotheses	Introduction
<b>METHODS</b>			
<i>Study design</i>	5	Whether data collection was planned before the index test and reference standard were performed (prospective study) or after (retrospective study)	Migraine classification results. Population
<i>Participants</i>	6	Eligibility criteria	Migraine classification results. Population
	7	On what basis potentially eligible participants were identified (such as symptoms, results from previous tests, inclusion in registry)	Migraine classification results. Table 1
	8	Where and when potentially eligible participants were identified (setting, location and dates)	Migraine classification results. Population
	9	Whether participants formed a consecutive, random or convenience series	Migraine classification results. Population
<i>Test methods</i>	10a	Index test, in sufficient detail to allow replication	Migraine classification results. Procedure
	10b	Reference standard, in sufficient detail to allow replication	Migraine classification results. Procedure
	11	Rationale for choosing the reference standard (if alternatives exist)	Migraine classification results. Procedure
	12a	Definition of and rationale for test positivity cut-offs or result categories of the index test, distinguishing pre-specified from exploratory	NA
	12b	Definition of and rationale for test positivity cut-offs or result categories of the reference standard, distinguishing pre-specified from exploratory	Proposed methodology for migraine classification. Interpretation (Accuracy and Precision)
	13a	Whether clinical information and reference standard results were available to the performers/readers of the index test	Bd and code <a href="https://doi.org/10.24433/CO.2826453.v2">https://doi.org/10.24433/CO.2826453.v2</a>
	13b	Whether clinical information and index test results were available to the assessors of the reference standard	NA
<i>Analysis</i>	14	Methods for estimating or comparing measures of diagnostic accuracy	Proposed methodology for migraine classification. Interpretation (Accuracy and Precision)
	15	How indeterminate index test or reference standard results were handled	NA
	16	How missing data on the index test and reference standard were handled	NA
	17	Any analyses of variability in diagnostic accuracy, distinguishing pre-specified from exploratory	Proposed methodology for migraine classification
	18	Intended sample size and how it was determined	Migraine classification results. Population
<b>RESULTS</b>			
<i>Participants</i>	19	Flow of participants, using a diagram	NA

	<b>20</b>	Baseline demographic and clinical characteristics of participants	Migraine classification results. Population
	<b>21a</b>	Distribution of severity of disease in those with the target condition	Migraine classification results. Procedure. Fig. 3
	<b>21b</b>	Distribution of alternative diagnoses in those without the target condition	NA
	<b>22</b>	Time interval and any clinical interventions between index test and reference standard	NA
<i>Test results</i>	<b>23</b>	Cross tabulation of the index test results (or their distribution) by the results of the reference standard	Results and discussion. Table 2
	<b>24</b>	Estimates of diagnostic accuracy and their precision (such as 95% confidence intervals)	Results and discussion. Table 2
	<b>25</b>	Any adverse events from performing the index test or the reference standard	NA
<b>DISCUSSION</b>			
	<b>26</b>	Study limitations, including sources of potential bias, statistical uncertainty, and generalisability	NA
	<b>27</b>	Implications for practice, including the intended use and clinical role of the index test	Results and discussion
<b>OTHER INFORMATION</b>			
	<b>28</b>	Registration number and name of registry	NA
	<b>29</b>	Where the full study protocol can be accessed	NA
	<b>30</b>	Sources of funding and other support; role of funders	NA