


Correction

Correction: Liu et al. A Predictive Model for the Risk of Posterior Circulation Stroke in Patients with Intracranial Atherosclerosis Based on High Resolution MRI. *Diagnostics* 2022, 12, 812

Zhenxing Liu ^{1,†}, Feiyang Zhong ^{2,†}, Yu Xie ¹, Xuanzhen Lu ³, Botong Hou ¹, Keni Ouyang ¹, Jiabin Fang ¹, Meiyao Liao ^{2,*} and Yumin Liu ^{1,*} 

¹ Department of Neurology, Zhongnan Hospital of Wuhan University, Wuhan 430071, China

² Department of Radiology, Zhongnan Hospital of Wuhan University, Wuhan 430071, China

³ Department of Neurology, Wuhan Third Hospital, Wuhan 430060, China

* Correspondence: liaomy@whu.edu.cn (M.L.); wb001792@whu.edu.cn (Y.L.);

Tel.: +86-189-710-965-90 (M.L.); +86-189-071-661-76 (Y.L.)

† These authors contributed equally to this work.

Errors occurred in the number of patients in the posterior circulation ischemic stroke (PCIS) group and non-PCIS group described in the original publication [1]. A correction of the data has been made to the Abstract, Results (Section 3.1, first paragraph), Table 1 and Figure 1.



Citation: Liu, Z.; Zhong, F.; Xie, Y.; Lu, X.; Hou, B.; Ouyang, K.; Fang, J.; Liao, M.; Liu, Y. Correction: Liu et al. A Predictive Model for the Risk of Posterior Circulation Stroke in Patients with Intracranial Atherosclerosis Based on High Resolution MRI. *Diagnostics* 2022, 12, 812. *Diagnostics* 2022, 12, 2088. <https://doi.org/10.3390/diagnostics12092088>

Received: 22 June 2022

Accepted: 28 June 2022

Published: 29 August 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Text Correction

In Abstract, the sentence “They were assigned to the posterior circulation stroke (49 patients) and non-posterior circulation stroke group (159 patients) based on clinical presentation and diffusion-weighted imaging (DWI)” should be replaced with “They were assigned to the posterior circulation stroke (59 patients) and non-posterior circulation stroke group (149 patients) based on clinical presentation and diffusion-weighted imaging (DWI)”.

In Section 3.1. *Clinicopathologic Characteristics of Enrolled Patients with Posterior ICAS*, the sentence “A total of 152 (73.1%) were male patients; there were 159 patients in non-posterior circulation ischemic stroke (non-PCIS) group and 49 patients in PCIS group” should be replaced with “A total of 152 (73.1%) were male patients; there were 149 patients in non-posterior circulation ischemic stroke (non-PCIS) group and 59 patients in PCIS group”.

Table Correction

In the first lines of Table 1, for the non-stroke group ($n = 159$) should be corrected to ($n = 149$) and for the stroke group ($n = 49$) should be corrected to ($n = 59$). The correct Table 1 is as below:

Figure Correction

In the last lines of Figure 1, for the group of the patients with non-posterior circulation ischemic stroke, ($n = 159$) should be corrected to ($n = 149$), and for the group of patients with posterior circulation ischemic stroke, ($n = 49$) should be corrected to ($n = 59$). The correct Figure 1 is as below:

Table 1. Clinical and intracranial plaque characteristics of study population and comparison between stroke and non-stroke patients.

Variables	All Patients (n = 208)	Non-Stroke Group (n = 149)	Stroke Group (n = 59)	p-Value
Age (year)	61.00 [54.00, 68.00]	62.00 [54.00, 68.00]	59.00 [53.00, 66.50]	0.174
Gender				0.575
Female (%)	56 (26.9)	38 (25.5)	18 (30.5)	
Male (%)	152 (73.1)	111 (74.5)	41 (69.5)	
BMI (kg/m ²)	25.39 [23.25, 27.14]	24.98 [23.01, 26.45]	25.95 [24.38, 27.59]	0.012
SBP (mmHg)	146.0 [131.00, 157.25]	145.00 [130.00, 153.00]	151.00 [138.50, 168.00]	0.003
DBP (mmHg)	84.00 [75.00, 95.00]	81.00 [73.00, 93.00]	87.00 [80.00, 98.00]	0.009
MAP (mmHg)	104.00 [94.67, 115.67]	102.67 [93.33, 113.33]	107.67 [100.67, 121.17]	0.003
Comorbidities, n (%)				
Hypertension	174 (83.7)	121 (81.2)	53 (89.8)	0.191
Diabetes	79 (38.0)	56 (37.6)	23 (39.0)	0.977
Dyslipidemia	66 (31.7)	53 (35.6)	13 (22.0)	0.084
Coronary heart disease	28 (13.5)	18 (12.1)	10 (16.9)	0.483
Previous stroke history	64 (30.8)	50 (33.6)	14 (23.7)	0.223
Smoking	92 (44.2)	67 (45.0)	25 (42.4)	0.854
Plaque characteristics				
Luminal stenosis (%)	0.41 [0.14, 0.65]	0.32 [0.10, 0.56]	0.56 [0.34, 0.88]	<0.001
Plaque burden (%)	0.80 [0.71, 0.88]	0.78 [0.69, 0.85]	0.87 [0.79, 0.96]	<0.001
Remodeling index (%)	1.10 [0.98, 1.21]	1.09 [0.97, 1.23]	1.10 [0.99, 1.17]	0.729
The type of remodeling (%)				0.655
Negative remodeling	40 (19.2)	30 (20.1)	10 (16.9)	
Intermediate remodeling	35 (16.8)	23 (15.4)	12 (20.3)	
Positive remodeling;	133 (63.9)	96 (64.4)	37 (62.7)	
Distribution patterns (%)				0.006
Diffuse	126 (60.6)	81 (54.4)	45 (76.3)	
Focal	82 (39.4)	68 (45.6)	14 (23.7)	
Quadrant Location (%)				
Ventral	151 (72.6)	103 (69.1)	48 (81.4)	0.107
Dorsal	139 (66.8)	92 (61.7)	47 (79.7)	0.021
Left	166 (79.8)	114 (76.5)	52 (88.1)	0.091
Right	144 (69.2)	96 (64.4)	48 (81.4)	0.027
Maximum wall thickness (mm)	1.46 [1.09, 2.01]	1.37 [1.02, 1.91]	1.58 [1.28, 2.11]	0.017
Maximum plaque length (mm)	5.56 [3.77, 10.57]	5.47 [3.99, 9.88]	6.45 [3.32, 11.30]	0.802
Ratio of maximum length to thickness	3.87 [2.50, 6.56]	4.17 [2.56, 6.68]	3.45 [2.26, 6.32]	0.18
Plaque enhancement (%)				<0.001 *
NO enhancement	15 (7.2)	14 (9.4)	1 (1.7)	
Mild enhancement	132 (63.5)	109 (73.2)	23 (39.0)	
Marked enhancement	61 (29.3)	26 (17.4)	35 (59.3)	
Plaque surface (%)				<0.001
Regular	73 (35.1)	65 (43.6)	8 (13.6)	
Irregular	135 (64.9)	84 (56.4)	51 (86.4)	
Geometry of the vertebrobasilar (%)				0.669
Walking	55 (26.4)	41 (27.5)	14 (23.7)	
Tuning Fork	59 (28.4)	44 (29.5)	15 (25.4)	
Lambda	61 (29.3)	43 (28.9)	18 (30.5)	
No Confluence	33 (15.9)	21 (14.1)	12 (20.3)	
Plaque location (%)				<0.001

Table 1. Cont.

Variables	All Patients (n = 208)	Non-Stroke Group (n = 149)	Stroke Group (n = 59)	p-Value
Right vertebral artery	64 (30.8)	48 (32.2)	16 (27.1)	
Left vertebral artery	83 (39.9)	69 (46.3)	14 (23.7)	
Basal artery	61 (29.3)	32 (21.5)	29 (49.2)	
Laboratory findings				
WBC ($\times 10^{12}/L$)	6.80 [5.50, 7.91]	6.50 [5.40, 7.73]	7.20 [6.14, 8.50]	0.005
RBC ($\times 10^9/L$)	4.44 [4.14, 4.76]	4.40 [4.12, 4.71]	4.63 [4.20, 4.89]	0.028
HGB (g/L)	136.00 [125.00, 144.93]	135.00 [125.00, 144.00]	138.00 [127.65, 148.50]	0.17
Platelets ($\times 10^9/L$)	211.00 [169.75, 260.75]	203.00 [167.00, 256.00]	236.00 [181.00, 271.50]	0.142
NLR (%)	2.45 [1.88, 3.22]	2.36 [1.88, 3.07]	2.68 [1.91, 3.98]	0.085
PLR (%)	126.81 [100.51, 166.94]	125.27 [100.22, 169.61]	131.09 [107.95, 155.00]	0.657
HCT (%)	40.80 [37.88, 43.52]	40.60 [37.50, 43.30]	41.00 [38.20, 44.10]	0.205
MCV (fL)	91.95 [89.27, 94.53]	92.40 [89.60, 94.80]	91.20 [88.30, 93.50]	0.12
MCH (pg)	30.80 [29.78, 31.80]	31.00 [30.00, 31.90]	30.50 [29.40, 31.35]	0.051
ALT (U/L)	19.00 [12.75, 27.00]	18.00 [12.00, 26.00]	20.00 [13.00, 27.50]	0.884
AST (U/L)	19.00 [16.00, 23.00]	19.00 [16.00, 23.00]	19.00 [16.00, 23.00]	0.84
TBIL ($\mu\text{mol}/L$)	12.35 [9.70, 16.20]	12.40 [9.70, 16.00]	11.70 [9.70, 16.65]	0.511
ALB (g/L)	39.00 [36.80, 41.00]	38.80 [36.50, 41.10]	39.30 [37.20, 40.50]	0.836
Glucose (mmol/L)	5.24 [4.69, 6.80]	5.24 [4.69, 6.81]	5.24 [4.70, 6.60]	0.939
BUN (mmol/L)	5.25 [4.40, 6.52]	5.00 [4.41, 6.46]	5.76 [4.40, 6.86]	0.157
Creatinine ($\mu\text{mol}/L$)	71.30 [59.98, 84.38]	72.20 [61.20, 84.90]	67.70 [57.95, 83.40]	0.405
Uric acid ($\mu\text{mol}/L$)	324.40 [275.40, 413.98]	326.00 [276.90, 402.20]	319.60 [271.90, 426.65]	0.862
CHOL (mmol/L)	4.06 [3.36, 4.93]	3.97 [3.26, 4.73]	4.40 [3.61, 5.19]	0.037
TG (mmol/L)	1.47 [1.09, 1.95]	1.41 [1.02, 1.77]	1.60 [1.27, 2.25]	0.012
HDL (mmol/L)	1.00 [0.88, 1.13]	1.02 [0.90, 1.14]	0.94 [0.82, 1.07]	0.04
LDL (mmol/L)	2.40 [1.85, 3.02]	2.32 [1.82, 2.95]	2.72 [2.07, 3.49]	0.026
LDa (mg/L)	167.60 [75.42, 320.48]	167.70 [75.50, 336.00]	167.50 [81.70, 269.05]	0.673
HCY ($\mu\text{mol}/L$)	14.20 [12.28, 16.40]	14.10 [12.40, 16.30]	14.30 [11.85, 16.80]	0.716
Fibrinogen (g/L)	328.50 [270.75, 380.00]	324.00 [267.00, 369.00]	347.00 [279.50, 392.50]	0.126
D-dimer (ng/mL)	94.00 [53.00, 164.25]	93.00 [46.00, 148.00]	107.00 [61.50, 207.50]	0.072

[] for IQR: interquartile range. ALB, albumin; ALT, alanine transaminase; AST, aspartate aminotransferase; BUN, blood urea nitrogen; BMI, body mass index; CHOL, total cholesterol; DBP, diastolic blood pressure; HDL, high density lipoprotein; HGB, hemoglobin; HCT, hematocrit; HCY, homocysteine; LDa, lipoprotein a; LDL, low density lipoprotein; MAP, mean arterial pressure; MCV, mean corpuscular volume; MCH, mean corpuscular hemoglobin; NLR, neutrophil-to-lymphocyte ratio; PLR, platelet-to-lymphocyte ratio; RBC, red blood cell; SBP, systolic blood pressure; TBIL, total bilirubin; TG, triglyceride; WBC, white blood cell. * Calculated with Fisher's exact test.

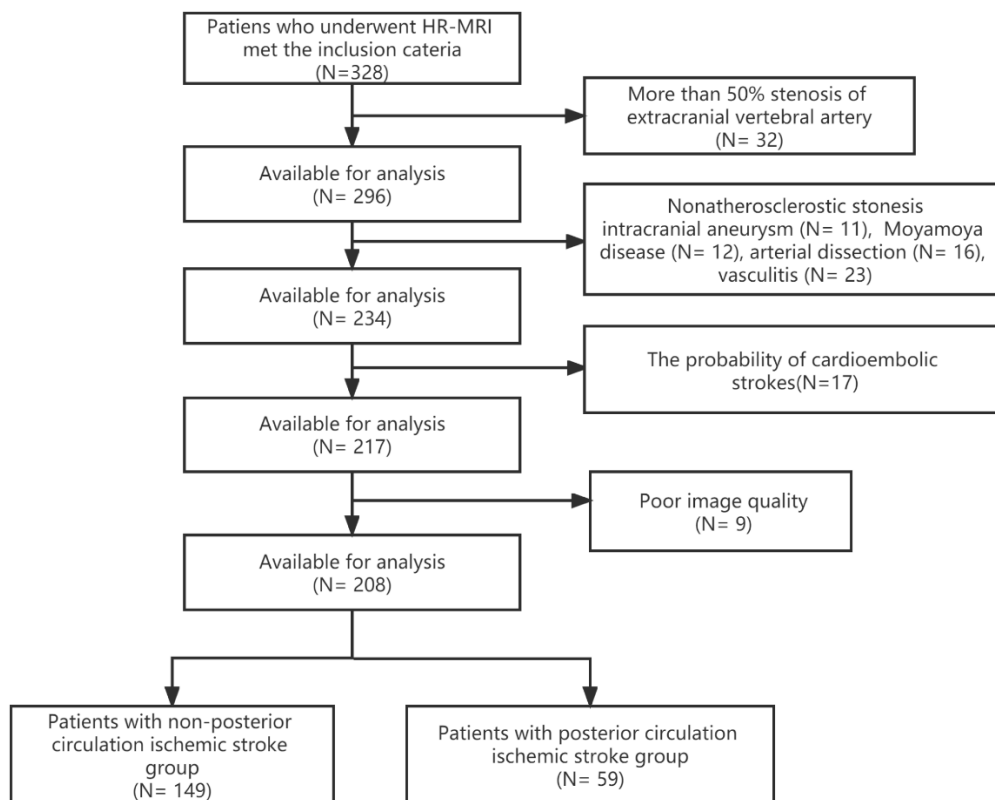


Figure 1. The flow chart for the inclusion of patients. HR-MRI, high-resolution magnetic resonance imaging.

The authors apologize for any inconvenience caused and state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

Reference

1. Liu, Z.; Zhong, F.; Xie, Y.; Lu, X.; Hou, B.; Ouyang, K.; Fang, J.; Liao, M.; Liu, Y. A predictive model for the risk of posterior circulation stroke in patients with intracranial atherosclerosis based on high resolution MRI. *Diagnostics* **2022**, *12*, 812. [[CrossRef](#)] [[PubMed](#)]